



REPUBLIC OF KENYA
MINISTRY OF INFORMATION, COMMUNICATIONS AND THE DIGITAL ECONOMY
STATE DEPARTMENT FOR ICT AND DIGITAL ECONOMY

SUMMARY OF CONTRACTS

Following the tender advertised on 6th February 2024 in my Gov and also in the Ministry website pursuant to section Sec 96(2) of Public Procurement and Asset Disposal Act 2015, the tender was closed and opened on 27th February, 2024 at 10.00am, the evaluation exercise has so far been concluded and the matrix below shows the outcome of award: -

S/No	Item Description	Tender No.	Firm recommended for Awarded by Evaluation Committee	Unit Price	Contacts No:
SUPPLY AND DELIVERY OF DESKTOP COMPUTERS					
1	MICDE/SDICT&DE/OT/FC/040/2023 /2024	Supply and delivery of Desktop Computer Type 2	EUROCOM SYSTEMS	436,000.00	0722779030
2	MICDE/SDICT&DE/OT/FC/045/2023 /2024	Supply and delivery of Desktop Computer Type 7	Microscan Technologies Ltd	184,700.00	0722305033
3	MICDE/SDICT&DE/OT/FC/046/2023 /2024	Supply and delivery of Desktop Computer Type 8	Westcom Hub Enterprises	141,538.00	0728370739
4	MICDE/SDICT&DE/OT/FC/047/2023 /2024	Supply and delivery of Desktop Computer Type 9	Crimson Computer Services Ltd	126,219.00	0729900676
5	MICDE/SDICT&DE/OT/FC/048/2023 /2024	Supply and delivery of Desktop Computer Type 10	Computer ways Ltd	266,434.00	0724517045
6	MICDE/SDICT&DE/OT/FC/049/2023 /2024	Supply and delivery of Desktop Computer Type 11	Crimson Computer Services Ltd	130,648.00	0729900676

7	MICDE/SDICT&DE/OT/FC/050/2023/2024	Supply and delivery of Desktop Computer Type 12	Westcom Hub Enterprises	84,748.24	0728370739
8	MOICT/SDIT/051/2023/2024	Supply and delivery of Desktop Computer Type 13	Westcom Hub Enterprises	130,879.00	0728370739
9	MOICT/SDIT/052/2023/2024	Supply and delivery of Desktop Computer Type 14	Crimson Computer Services Ltd	134,954.00	0729900676
S/No	Item Description	Tender No.	Firm recommended for Awarded by Evaluation Committee	Unit Price	Contact no

SUPPLY AND DELIVERY OF TABLETS COMPUTER

1)	MICDE/SDICT&DE/OT/FC/128/2023-2024	SUPPLY AND DELIVERY OF TABLETS COMPUTER TYPE 12	Computerways Limited	463,768.00	0724517045
2)	MICDE/SDICT&DE/OT/FC/129/2023-2024	SUPPLY AND DELIVERY OF TABLETS COMPUTER TYPE 13	Computerways Limited	336,168.00	0724517045
3)	MICDE/SDICT&DE/OT/FC/130/2023-2024	SUPPLY AND DELIVERY OF TABLETS COMPUTER TYPE 14	Computerways Limited	495,000	0724517045
4)	MICDE/SDICT&DE/OT/FC/131/2023-2024	SUPPLY AND DELIVERY OF TABLETS COMPUTER TYPE 15	MFI Document Solutions Limited	115,000	0722502180
5)	MICDE/SDICT&DE/OT/FC/133/2023-2024	SUPPLY AND DELIVERY OF TABLETS COMPUTER TYPE 17	Computer ways Limited	284,200.00	0724517045
no	Tender No.	Tender Description	Successful Firm Awarded by Evaluation Committee	Unit price	Contact no

SUPPLY AND DELIVERY OF PRINTERS

1.	MICDE/SDICT&DE/OT/FC/076/2023-2024	Type 1 - Heavy Duty Multi-Functional Printer (80+) - Monochrome Multifunctional digital document system with Saddle Stitch Finisher	MFI Document Solutions	2,735,000.00	0722502180
2.	MICDE/SDICT&DE/OT/FC/077/2023-2024	Type 2 - Heavy Duty Multi-Functional Printer (80+) - Monochrome	MFI Document Solutions	2,750,000.00	0722502180

		Multifunctional for A3 with Punch and Finisher			
3.	MICDE/SDICT&DE/OT/FC/078/2023 -2024	Type 3 - Heavy Duty Multi-Functional Printer (80+) - Monochrome Laser Multifunctional with Saddle Finisher and Punch Finisher	MFI Document Solutions	1,980,000.00	0722502180
4.	MICDE/SDICT&DE/OT/FC/079/2023 -2024	Type 4 - Heavy Duty Multi-Functional Printer (80+) - Monochrome with Saddle Finisher and Punch Finisher	MFI Document Solutions	1,980,000.00	0722502180
5.	MICDE/SDICT&DE/OT/FC/080/2023 -2024	Type 5 - Heavy Duty Multi-Functional Printer (80+) Monochrome with Finisher	MFI Document Solutions	1,525,000.00	0722502180
6.	MICDE/SDICT&DE/OT/FC/081/2023 -2024	Type 6 - Heavy Duty Multifunctional Printer (80+) Color with Saddle Stitch Finisher	MFI Document Solutions	3,017,000.00	0722502180
7.	MICDE/SDICT&DE/OT/FC/082/2023 -2024	Type 7 - Heavy Duty Multi-Functional Printer (60+) - Monochrome Color Laser Multifunctional with Saddle Stitch Finisher and Punch Finisher	MFI Document Solutions	1,615,000.00	0722502180
8.	MICDE/SDICT&DE/OT/FC/083/2023 -2024	Type 8 - Heavy Duty Multi-Functional Printer (60+/A4/A3) Monochrome with Finisher	MFI Document Solutions	1,000,000.00	0722502180
9.	MICDE/SDICT&DE/OT/FC/084/2023 -2024	Type 9 - Heavy Duty Multi-Functional Printer (60+/A4/A3) Monochrome without Finisher	MFI Document Solutions	852,000.00	0722502180
10.	MICDE/SDICT&DE/OT/FC/085/2023 -2024	Type 10 - Multi-Function Heavy Duty Color Printer (60+/A4/A3) – Without Finisher	MFI Document Solutions	1,578,600.00	0722502180
11.	MICDE/SDICT&DE/OT/FC/086/2023 -2024	Type 11 - Medium Duty Multi-Functional Printer (40+/A4/A3) Monochrome	Computer ways Limited	455,564.00	0724517045
12.	MICDE/SDICT&DE/OT/FC/087/2023 -2024	Type 12 - Medium Duty Multi-Functional Printer (40+/A4/A3) color	MFI Document Solutions Limited	1,157,860.00	0722502180

13.	MICDE/SDICT&DE/OT/FC/088/2023 -2024	Type 13 - Medium Duty Multi-Functional Printer (40+/A4/A3) Monochrome	Computer ways Limited	455,564.00	0724517045
14.	MICDE/SDICT&DE/OT/FC/089/2023 -2024	Type 14 - Medium Duty Multi-Functional Printer (40+/A4/A3) color	MFI Document Solutions Limited	1,240,000.00	0722502180
15.	MICDE/SDICT&DE/OT/FC/090/2023 -2024	Type 15 - Light Duty Multi-Functional Printer (30+/A4/A3) Monochrome	Computer ways Limited	352,605.00	0724517045
16.	MICDE/SDICT&DE/OT/FC/091/2023 -2024	Type 16 - Light Duty Multi-Functional Printer (30+/A4/A3) Color	Westcom Hub Enterprises	653,697.20	0728370739
17.	MICDE/SDICT&DE/OT/FC/092/2023 -2024	Type 17 - Desktop Monochrome Multi-Functional Printer (40+ / A4 only)	Crimson Computer Services Limited	71,776.00	0729900676
18.	MICDE/SDICT&DE/OT/FC/093/2023 -2024	Type 18 - Desktop Multi-Functional Printer Color (20+/A4 Only)	MFI Document Solutions Limited	130,000.00	0722502180
19.	MICDE/SDICT&DE/OT/FC/094/2023 -2024	Type 19 - High Speed Monochrome Multi-Functional Printer	MFI Document Solutions Limited	3,320,000.00	0722502180
20.	MICDE/SDICT&DE/OT/FC/095/2023 -2024	Type 20 - High Speed Color Multi-Functional Printer	MFI Document Solutions Limited	13,750,000.00	0722502180
21.	MICDE/SDICT&DE/OT/FC/096/2023 -2024	Type 21 - High Speed Multi-Functional Printer color with Controller and Booklet Finisher	MFI Document Solutions Limited	5,850,000.00	0722502180
22.	MICDE/SDICT&DE/OT/FC/097/2023 -2024	Type 22 - Multi-Functional Color Inkjet Printer – Heavy Duty with Staple and Booklet Finisher	Copierforce(Kenya) Limited	3,062,400.00	0722516699
23.	MICDE/SDICT&DE/OT/FC/098/2023 -2024	Type 23 - Multi-Function Printer Monochrome Inkjet Printer- Heavy Duty with Staple Finisher	Copierforce(Kenya) Limited	2,378,000.00	0722516699
24.	MICDE/SDICT&DE/OT/FC/099/2023 -2024	Type 24 - Multi-Function Inkjet Color Printer (A3/A4) Medium duty	Copierforce(Kenya) Limited	774,880.00	0722516699

25.	MICDE/SDICT&DE/OT/FC/100/2023 -2024	Type 25 - Multi-function Monochrome Inkjet Printer Light duty (A4)	Computer ways Limited	173,158.00	0724517045
26.	MICDE/SDICT&DE/OT/FC/101/2023 -2024	Type 26 - Multi-Functional Color Inkjet Printer- Light Duty (A4)	Copierforce(Kenya) Limited	292,900.00	0722516699
27.	MICDE/SDICT&DE/OT/FC/103/2023 -2024	Type 28-Impact printer - Heavy duty	Copierforce(Kenya) Limited	559,120.00	0722516699
28.	MICDE/SDICT&DE/OT/FC/104/2023 -2024	Type 29 - Impact Printer - Medium duty	Copierforce(Kenya) Limited	71,340.00	0722516699
29.	MICDE/SDICT&DE/OT/FC/105/2023 -2024	Type 30 - Impact Printer - Light Duty	Copierforce (Kenya) Limited	285,360.00	0722516699
30.	MICDE/SDICT&DE/OT/FC/106/2023 -2024	Type 31 - Wide Format Printer/ Scanner	Copierforce (Kenya) Limited	690,200.00	0722516699
31.	MICDE/SDICT&DE/OT/FC/107/2023 -2024	Type 32 - Professional Photo Printer	Copierforce (Kenya) Limited	204,740.00	0722516699
32.	MICDE/SDICT&DE/OT/FC/108/2023 -2024	Type 33 - Photo Printer Wide Format	Copierforce (Kenya) Limited	742,400.00	0722516699
33.	MICDE/SDICT&DE/OT/FC/109/2023 -2024	Type 34 - Label Printer	Copierforce (Kenya) Limited	35,960.00	0722516699
34.	MICDE/SDICT&DE/OT/FC/110/2023 -2024	Type 35 - Label Printer	Copierforce (Kenya) Limited	71,920.00	0722516699
35.	MICDE/SDICT&DE/OT/FC/111/2023 -2024	Type 36 - Receipt Printer	Copierforce (Kenya) Limited	37,700.00	0722516699
36.	MICDE/SDICT&DE/OT/FC/112/2023 -2024	Type 37 - All in One Monochrome Printer, Scanner, Copier- Medium Speed	Computerways Limited	455,564.00	0724517045
37.	MICDE/SDICT&DE/OT/FC/114/2023 -2024	Type 39 - Departmental Medium Duty Multifunctional Colour MFP (50 + /A4/A3)	Computerways Limited	1,702,653.00	0724517045

38.	MICDE/SDICT&DE/OT/FC/115/2023 -2024	Type 40 - Departmental Light Duty Multifunctional Color MFP (40 + /A4/A3)	MFI Document Solutions Limited	978,600.00	0722502180
39.	MICDE/SDICT&DE/OT/FC/116/2023 -2024	Type 41 - Departmental Heavy Duty Multifunctional MFP (60 + /A4/A3) Monochrome with Finisher	MFI Document Solutions Limited	1,096,000.00	0722502180
no	Tender Number	Tender Description	Successful Firm Awarded by Evaluation Committee	Unit price	Contact no

SUPPLY AND DELIVERY OF UPS

1.	MICDE/SDICT&DE/OT/FC/053/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 1	Crimson Computers Services Limited	11,238.00	0729900676
2.	MICDE/SDICT&DE/OT/FC/054/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 2	Crimson Computers Services Limited	11,238.00	0729900676
3.	MICDE/SDICT&DE/OT/FC/055/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 3	Sohn And Sol Technologies	9,507.00	0724517045
4.	MICDE/SDICT&DE/OT/FC/056/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 4	Crimson Computers Services Limited	11,238.00	0729900676
5.	MICDE/SDICT&DE/OT/FC/057/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 5	Copierforce (Kenya) Limited	14,152.00	0722516699
6.	MICDE/SDICT&DE/OT/FC/058/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 6	Crimson Computers Services	17,272.00	0729900676
7.	MICDE/SDICT&DE/OT/FC/059/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 7	Copierforce (Kenya) Limited	78,648.00	0722516699
8.	MICDE/SDICT&DE/OT/FC/060/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 8	Crimson Computer Services Limited	26,343.00	0729900676
9.	MICDE/SDICT&DE/OT/FC/061/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 9	Crimson Computer Services Limited	35,762.00	0729900676
10.	MICDE/SDICT&DE/OT/FC/062/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 10	Crimson Computer Services Limited	186,055.00	0729900676
11.	MICDE/SDICT&DE/OT/FC/063/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 11	Copierforce (Kenya) Limited	177,364.00	0722516699

12.	MICDE/SDICT&DE/OT/FC/064/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 12	Copierforce (Kenya) Limited	142,680.00	0722516699
13.	MICDE/SDICT&DE/OT/FC/065/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 13	Copierforce (Kenya) Limited	221,560.00	0722516699
14.	MICDE/SDICT&DE/OT/FC/066/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 14	Copierforce (Kenya) Limited	356,700.00	0722516699
15.	MICDE/SDICT&DE/OT/FC/067/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 15	Copierforce (Kenya) Limited	516,350.00	0722516699
16.	MICDE/SDICT&DE/OT/FC/068/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 16	Copierforce (Kenya) Limited	726,160.00	0722516699
17.	MICDE/SDICT&DE/OT/FC/070/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 18	Computerways Limited	711,080.00	0724517045
18.	MICDE/SDICT&DE/OT/FC/071/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 19	Computerways Limited	1,680,260.00	0724517045
19.	MICDE/SDICT&DE/OT/FC/072/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 20	Computerways Limited	2,471,380.00	0724517045
20.	MICDE/SDICT&DE/OT/FC/073/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 21	Computerways Limited	523,765.00	0724517045
21.	MICDE/SDICT&DE/OT/FC/074/2023 -2024	UINTERRUPTED POWER SUPPLY (UPS) TYPE 22	Computerways Limited	3,401,120.00	0724517045
S/No	Item Description	Tender No.	Firm recommended for Awarded by Evaluation Committee	Unit Price	

SUPPLY AND DELIVERY OF LAPTOPS

1	MICDE/SDICT&DE/OT/FC/004/2023 -2024	Supply And Delivery of Laptop Computer Type 1	Westcomhub Enterprise Ltd	127,559.16	0728370739
2	MICDE/SDICT&DE/OT/FC/005 /2023-2024	Supply And Delivery of Laptop Computer Type 2	Westcomhub Enterprise Ltd	130,704.50	0728370739
3	MICDE/SDICT&DE/OT/FC/006/2023 -2024	Supply And Delivery of Laptop Computer Type 3	Computerways Limited	137,576.00	0724517045
4	MICDE/SDICT&DE/OT/FC/007/2023 -2024	Supply And Delivery of Laptop Computer Type 4	Westcomhub Enterprise Ltd	131,752.92	0728370739

5	MICDE/SDICT&DE/OT/FC/008/2023 -2024	Supply And Delivery of Laptop Computer Type 5	Crimson Computer Services Ltd	124,595.00	0729900676
6	MICDE/SDICT&DE/OT/FC/010/2023 -2024	Supply And Delivery of Laptop Computer Type 7	Westcomhub Enterprise Ltd	120,656.00	0728370739
7	MICDE/SDICT&DE/OT/FC/011/2023 -2024	Supply And Delivery of Laptop Computer Type 8	Crimson Computer Services Ltd	144,510.00	0729900676
8	MICDE/SDICT&DE/OT/FC/012/2023 -2024	Supply And Delivery of Laptop Computer Type 9	Crimson Computer Services Ltd	144,510.00	0729900676
9	MICDE/SDICT&DE/OT/FC/013/2023 -2024	Supply And Delivery of Laptop Computer Type 10	Westcomhub Enterprise Ltd	119,521.20	0728370739
10	MICDE/SDICT&DE/OT/FC/014/2023 -2024	Supply And Delivery of Laptop Computer Type 11	Westcomhub Enterprise Ltd	126,336.00	0728370739
11	MICDE/SDICT&DE/OT/FC/015/2023 -2024	Supply And Delivery of Laptop Computer Type 12	Crimson Computer Services Ltd	129,984.00	0729900676
12	MICDE/SDICT&DE/OT/FC/016/2023 -2024	Supply And Delivery of Laptop Computer Type 13	Crimson Computer Services Ltd	146,926.00	0729900676
13	MICDE/SDICT&DE/OT/FC/017/2023 -2024	Supply And Delivery of Laptop Computer Type 14	Crimson Computer Services Ltd	137,181.00	0729900676
14	MICDE/SDICT&DE/OT/FC/018/2023 -2024	Supply And Delivery of Laptop Computer Type 15	Computerways Limited	134,519.00	0724517045
15	MICDE/SDICT&DE/OT/FC/019/2023 -2024	Supply And Delivery of Laptop Computer Type 16	Computerways Limited	314,383.00	0724517045
16	MICDE/SDICT&DE/OT/FC/020/2023 -2024	Supply And Delivery of Laptop Computer Type 17	Computerways Limited	306,292.00	0724517045
17	MICDE/SDICT&DE/OT/FC/021/2023 -2024	Supply And Delivery of Laptop Computer Type 18	Crimson Computer Services Ltd	139,248.00	0729900676
18	MICDE/SDICT&DE/OT/FC/022/2023 -2024	Supply And Delivery of Laptop Computer Type 19	Westcomhub Enterprise Ltd	129,656.10	0728370739
19	MICDE/SDICT&DE/OT/FC/023/2023 -2024	Supply And Delivery of Laptop Computer Type 20	Computerways Limited	344,000.00	0724517045

20	MICDE/SDICT&DE/OT/FC/024/2023 -2024	Supply And Delivery of Laptop Computer Type 21	Computerways Limited	390,000.00	0724517045
21	MICDE/SDICT&DE/OT/FC/025/2023 -2024	Supply And Delivery of Laptop Computer Type 22	Computerways Limited	422,000.00	0724517045
22	MICDE/SDICT&DE/OT/FC/026/2023 -2024	Supply And Delivery of Laptop Computer Type 23	Dignity Traders	680,000.00	0722776812
23	MICDE/SDICT&DE/OT/FC/027/2023 -2024	Supply And Delivery of Laptop Computer Type 24	Squantum Enterprises Ltd	197,100.00	
24	MICDE/SDICT&DE/OT/FC/028/2023 -2024	Supply And Delivery of Laptop Computer Type 25	Computerways Limited	351,746.00	0724517045
25	MICDE/SDICT&DE/OT/FC/030/2023 -2024	Supply And Delivery of Laptop Computer Type 27	Dignity Traders	476,000.00	0722776812
26	MICDE/SDICT&DE/OT/FC/031/2023 -2024	Supply And Delivery of Laptop Computer Type 28	Computerways Limited	343,940.00	0724517045
27	MICDE/SDICT&DE/OT/FC/032/2023 -2024	Supply And Delivery of Laptop Computer Type 29	Computerways Limited	325,900.00	0724517045
28	MICDE/SDICT&DE/OT/FC/034/2023 -2024	Supply And Delivery of Laptop Computer Type 31	Computerways Limited	331,696.00	0724517045
29	MICDE/SDICT&DE/OT/FC/035/2023 -2024	Supply And Delivery of Laptop Computer Type 32	Crimson Computer Services Ltd	97,232.00	0729900676
30	MICDE/SDICT&DE/OT/FC/036/2023 -2024	Supply And Delivery of Laptop Computer Type 33	Crimson Computer Services Ltd	104,047.00	0729900676
31	MICDE/SDICT&DE/OT/FC/037/2023 -2024	Supply And Delivery of Laptop Computer Type 34	Westcomhub Enterprise Ltd	83,699.80	0728370739
32	MICDE/SDICT&DE/OT/FC/038/2023 -2024	Supply And Delivery of Laptop Computer Type 35	Computerways Limited	94,600	0724517045

DESKTOP COMPUTER TYPE 2

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	8-Core CPU, 8-Core GPU	
System Memory	8GB unified memory Configurable	
Storage Subsystem	512 GB SSD configurable	
Form Factor	All-in-one	
Camera	1080p FaceTime HD camera	
Keyboard	Magic Keyboard with Numeric Keypad	
Pointing Device/Mouse	Apple Magic Mouse	
Audio	Built-in speaker/microphone	
Communication Interface	Gigabit Ethernet	
	802.11ac Wi-Fi 6.0	
	Bluetooth 5.0 wireless technology	
I/O Interface Ports	2 x USB 3 ports	
	2 x thunderbolt / USB 4 ports	
	USB-C to VGA, HDMI, DVI, Thunderbolt 2 adapter	
	3.5 mm headphone jack	
Operating System	Latest Mac OS	
Software	Microsoft Office for Mac with Genuine License	
	Latest Compatible Antivirus (With valid license)	
Display/Monitor	24-inch 4K Retina display	
Power Supply	220 - 240V AC, Frequency 50/60 HZ	
Accessories	power adapter	
	USB-C to Lightning Cable	
	Power cord (2 m)	
Warranty	One (1) Year, Proof of Warranty must be provided	
UPS	Include 700VA UPS with surge protection	
Brochures	ORIGINAL DETAILED AND HIGHLITED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER TYPE 7

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Logic	11 th Generation Intel® Core™ i7, 12 MB L3 cache	
System Memory	16 GB DDR4	
Storage	1 TB SSD	
Form Factor	All in one	
Display	27" diagonal FHD display	
Graphics	Intel graphics	
Keyboard	USB/wireless Enhanced Keyboard	
Pointing Device	USB/wireless Optical Mouse	
Audio	inbuilt speakers	
	headphone jack	
Webcam	1080p FHD webcam with integrated digital microphone,	
Communication Interface	Integrated 10/100/1000 Gigabit Ethernet	
	802.11a/b/g/n/ac (2x2) Wi-Fi 6 and Bluetooth 5.0	
I/O Interface Ports	2 SuperSpeed USB Type A	
	2 USB 2.0 Type-A;	
	1 HDMI	
	1 x RJ 45 Ethernet jack	
	Media card Reader	
	headphone/microphone combo;	
Operating System	Genuine Windows 11 Professional 64 bit pre-installed (licensed with Recovery Disks)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Internet Security software with valid license	
Power Supply	220 - 240 VAC 50/60 HZ /AC power adapter	
Warranty	One (1) Year, Proof of Warranty must be provided	
Accessories	Frame stand	
UPS	Include 700VA UPS	
Brochures	ORIGINAL DETAILED AND HIGHLIGHTED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER – TYPE 8

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th generation 8 core - Intel Core i7 Processor, 16 MB Cache	
System Memory	16 GB (DDR4	
Storage Subsystem	1 TB PCIe SSD	
Form Factor	All-in-One	
Display	All-in-One 23" display (capacitive touch screen) with Integrated Intel UHD Graphics	
Graphics	Intel UHD Graphics	
Optical Drives	16X Dual Layer DVD+/-RW	
Keyboard and Pointing Device	1 x USB Wired Keyboard 1 x USB Optical Wheel Mouse	
Audio	Internal Stereo Speakers 1 headphone port	
Webcam	Integrated 5MP webcam (front) and 5 MP webcam (rear)	
Communication Interface	Integrated Intel 10/100/1000 Mbps Gigabit Ethernet;	
	Intel 802.11ac Network Interface Card PCIe with Bluetooth	
I/O interface ports	4 USB 3.2 Gen 1 1 USB 3.2 Gen 2 1 HDMI-out 1 x RJ45 jack for Ethernet 1 USB 3.1 (fast charging)	
Operating System	Genuine Windows 11 Professional (64-bit) pre-installed (licensed with restore disk)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Version of Antivirus, licensed	
Power Supply	220-240 VAC, 50/60 Hz (auto-sensing)	
Warranty	One (1) Year	
UPS	Include 700VA UPS with power cables	
Brochures	ORIGINAL DETAILED AND HIGHLIGHTED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER TYPE 9

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Logic	11 th Generation Intel® Core™ i5 (8 MB L3 cache, 4 cores)	
System Memory	8 GB DDR4	
Storage	512 GB SSD storage	
Form Factor	All in one	
Display	23.8" diagonal FHD touch display	
Graphics	Intel UHD graphics	
Optical Drives	DVD Writer	
Keyboard	USB Enhanced Keyboard	
Pointing Device/Mouse	USB Optical Mouse	
Audio	Stereo audio system with inbuilt speakers	
	Headphone/microphone jack	
Webcam	720p HD camera with integrated dual array digital microphones	
Communication Interface	Integrated Gigabit Ethernet - 10/100/1000 Mbps	
	802.11ax Wi-Fi 6.0 and 5.0 Bluetooth	
I/O Interface Ports	2 x SuperSpeed USB Type-A	
	2 x USB 2.0 Type-A;	
	1 x RJ 45 Ethernet jack	
	1 x HDMI out	
	Media card Reader	
	Headphone /microphone jack	
Operating System	Genuine Windows 11 Professional 64 bit pre-installed (licensed with Recovery Disks)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Internet Security software with valid license	
Power Supply	220 - 240 VAC 50/60 HZ (Autosensing)/AC power adapter	
Warranty	One (1) Year, Proof of Warranty must be provided	
UPS	Include 700VA UPS with surge protection	
Brochures	ORIGINAL DETAILED AND HIGHLIGHTED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER TYPE 10

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Logic	12th Generation Intel Core i9	
System Memory	16GB DDR4	
Storage Acceleration	16 GB Intel Optane	
Storage Subsystem	1 TB SSD	
Form Factor	Tower	
Display	24" LED-Backlit Monitor (Same brand as CPU)	
Graphics	NVIDIA GeForce 4GB GDDR	
Keyboard	USB Enhanced Keyboard	
Pointing Device/Mouse	USB Optical Mouse	
Audio	Stereo audio system with inbuilt speakers	
	Audio ports: headphone and microphone	
Communication Interface	Integrated Gigabit Ethernet - 10/100/1000 Mbps	
	802.11ac Wi-Fi 6.0 and 5.0 Bluetooth	
I/O Interface Ports	2 X USB 3.1 Gen 1 ports	
	1 X USB 3.1 Gen 1 (Type-C) port	
	2X USB 2.0 ports	
	1 x HDMI port	
	1 x RJ 45 Ethernet jack	
	1 x Display port	
	Media card Reader	
	Headset and audio jack	
Operating System	Genuine Windows 10 Professional 64 bit pre-installed (licensed with recovery Disks)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Internet Security software with valid license	
Power Supply	220 - 240 VAC 50/60 HZ (Autosensing)	
Accessories	Power cables; HDMI cable	
UPS	Include 700VA UPS with surge protection	
Warranty	One (1) Year, Proof of Warranty must be provided	
Brochures	ORIGINAL DETAILED AND HIGHLIGHTED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER TYPE 11

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Logic	11 th Generation Intel Core i7, 16 MB cache, 8 cores	
System Memory	8 GB DDR4	
Storage Subsystem	512 GB SSD	
Form Factor	Tower	
Display	21.5" LED-Backlit Monitor (Same brand as CPU)	
Graphics	Intel UHD Graphics	
Optical Drives	Internal DVD writer	
Keyboard	USB Enhanced Keyboard	
Pointing Device/Mouse	USB Optical Mouse	
Audio	Stereo audio system with inbuilt speakers	
	2 x Audio ports: headphone and microphone	
Communication Interface	Integrated Gigabit Ethernet card 10/100/1000 Mbps	
	802.11ac Wi-Fi 6.0 and 5.0 Bluetooth	
I/O Interface Ports	1 x SuperSpeed USB Type-C 10Gbps	
	4 x USB 2.0	
	4 x SuperSpeed USB 10Gbps	
	1 x HDMI port	
	1 x RJ 45 Ethernet jack	
	1 x Display port 1.2	
	Media card Reader	
	Headphone	
	Line-in and Line Out	
Operating System	Genuine Windows 11 Professional 64 bit pre-installed (licensed with recovery Disks)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Internet Security software with valid license	
Power Supply	220 - 240 VAC 50/60 HZ (Autosensing)	
Warranty	One (1) Year, Proof of Warranty must be provided	
UPS	Include 700VA UPS with surge protection	
Accessories	Cables	
Brochures	ORIGINAL DETAILED AND HIGHLIGHTED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER TYPE 12

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Logic	11 th generation Intel® Core™ i5 (12 MB L3 cache, 6 cores)	
System Memory	8GB DDR4,	
Storage subsystem	1 TB SATA HDD	
Form Factor	Micro Tower	
Display	24" LED-Backlit LCD Monitor (Same brand as CPU)	
Graphics	Intel HD Graphics	
Optical Drives	DVD +/- RW	
Keyboard	USB Enhanced Keyboard	
Pointing Device/Mouse	USB Optical Mouse	
Audio	Stereo audio system with inbuilt speakers	
	headphone and microphone jack	
Communication Interface	Integrated Gigabit Ethernet card 10/100/1000 Mbps	
	802.11ac Wi-Fi 6.0 and 5.0 Bluetooth	
I/O Interface Ports	2 X SuperSpeed USB 5-10Gbps	
	4 USB 2.0	
	1 x VGA port	
	1 x RJ 45 Ethernet jack	
	1 x HDMI	
	1 x VGA	
	1 x power connector	
	Audio Combo Jack (Front)	
	Line-out (Rear)	
Operating System	Genuine Windows 11 Professional 64 bit pre-installed (licensed with recovery Disks)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Internet Security software with valid License	
Power Supply	220 - 240 VAC 50/60 HZ (Autosensing)	
Warranty	One (1) Year, Proof of Warranty must be provided	
UPS	Include 700VA UPS with surge protection	
Brochures	ORIGINAL DETAILED AND HIGHLITED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER TYPE 13

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Logic	11 th generation Intel Core i7, 8-cores, 16MB Cache	
System Memory	32GB DDR4 + 32GB Intel® Optane	
Storage subsystem	1TB GB SSD	
Form Factor	Micro Tower	
Display	24" LED-Backlit Monitor (Same brand as CPU)	
Graphics	Intel UHD Graphics	
Optical Drives	Internal DVD Writer	
Keyboard	USB Enhanced Keyboard	
Pointing Device/Mouse	USB Optical Mouse	
Audio	Stereo audio system with inbuilt speakers	
	Headphone jack	
Communication Interface	Integrated Gigabit Ethernet - 10/100/1000 Mbps	
	802.11ac Wi-Fi 6.0 and 5.0 Bluetooth	
I/O Interface Ports	4 x USB-A 3.2	
	4 x USB 2.0	
	1 x VGA port	
	1 x RJ 45 Ethernet jack	
	1 x Display port	
	Media card Reader	
	Headphone	
	Line-in and Line Out	
Operating System	Genuine Windows 11 Professional 64 bit pre-installed licensed with recovery Disks)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Internet Security software with valid License	
Power Supply	220 - 240 VAC 50/60 HZ (Autosensing)	
Warranty	One (1) Year, Proof of Warranty must be provided	
UPS	Include 700VA UPS with surge protection	
Brochures	ORIGINAL DETAILED AND HIGHLITED BROCHURE MUST BE PROVIDED	

DESKTOP COMPUTER TYPE 14

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Logic	Intel® Core™ i5 (12 MB L3 cache, 6 cores)	
System Memory	8 GB DDR4	
Storage	512 GB PCIe SSD	
Form Factor	Microtower	
Display/Graphics	24" LED-Backlit LCD Monitor (Same brand as CPU)	
Graphics	Intel® UHD Graphics	
Keyboard	USB Enhanced Keyboard	
Pointing Device/Mouse	USB Optical Mouse	
Audio	inbuilt speakers	
	3.5mm headphone jack	
Communication Interface	Integrated Gigabit Ethernet - 10/100/1000 Mbps	
I/O Interface Ports	1 power connector	
	2 SuperSpeed USB Type-A 10Gbps; 2 USB Type-A 480Mbps	
	3 SuperSpeed USB Type-A 5Gbps	
	1 x VGA port	
	1 x RJ 45 Ethernet jack	
	1 x HDMI	
	1 DisplayPort	
	Media card Reader	
	1 headphone/microphone combo;	
Operating System	Genuine Windows 11 Professional 64 bit pre-installed (licensed with recovery Disks)	
Software	Microsoft Office Professional 2021 with Genuine License	
	Latest Internet Security software with valid License	
Power Supply	220 - 240 VAC 50/60 HZ	
Warranty	One (1) Year, Proof of Warranty must be provided	
UPS	Include 700VA UPS with surge protection	
Brochures	ORIGINAL DETAILED AND HIGHLIGHTED BROCHURE MUST BE PROVIDED	

TABLET COMPUTER TYPE 12		
REQUIRED MINIMUM SPECIFICATIONS		
	FEATURE	DETAILS
1.	Processor & Logic	Quadcore 11 th Gen Intel Coi7
2.	System Memory	16B
3.	Storage Subsystem	512 GB SSD
4.	Form Factor	Tablet Computer
5.	Display	13" PixelSense multi-touch display
6.	Security	Enterprise-grade protection
7.	Sim Card	Electronic SIM card (e-SIM), nano SIM
8.	Sensors	Accelerometer; Gyroscope; Magnetometer; Ambient light sensor
9.	Graphics	Intel Iris X Graphics
10.	Audio	Stereo speakers with Dolby Audio
11.	Camera	5.0MP front-facing camera with 1080p full HD video; 10.0 MP rear-facing autofocus camera with 1080p HD and 4k video
12.	Cellular and wireless Network	Wi-Fi 6: 802.11ac; Bluetooth Wireless 5.0 technology; Gigabit LTE Advanced; GPS
13.	I/O Interface Ports	2 x USB-C; 1 * Surface Connect port; 1 * nano SIM tray Surface Keyboard port
14.	Operating System	Genuine Windows 1 Professional Pre-installed (with valid License)
15.	Software	Microsoft Office Professional 2021 with Genuine License Internet Security Software with valid license
16.	Battery	51.5 whr battery
17.	Accessories	Compatible surface type cover; Compatible surface keyboard; Compatible digital pen; Surface dock; Power supply; Carrying Case
18.	Warranty	One (1) Year, Proof of Warranty must be provided
	Original detailed and highlighted Brochures MUST be submitted	

TABLET COMPUTER TYPE 13		
REQUIRED MINIMUM SPECIFICATIONS		
S/N	FEATURE	DETAILS
1.	Processor & Logic	Quad-core 11 th Gen Coi5
2.	System Memory	8 GB
3.	Storage Subsystem	256 GB SSD
4.	Form Factor	Tablet Computer
5.	Display	13" PixelSense multi-touch display
6.	Security	Enterprise-grade protection
7.	Sensors	Accelerometer; Gyroscope; Magnetometer; Ambient light sensor
8.	Sim Card	Electronic SIM card (e-SIM), nano SIM
9.	Graphics	Adreno 685 GPU
10.	Audio	Stereo speakers with Dolby Audio
11.	Camera	5.0MP front-facing camera with 1080p full HD video; 10.0 MP rear-facing autofocus camera with 1080p HD and 4k video
12.	Cellular and wireless Network	Wi-Fi 6; 802.11ac; Bluetooth Wireless 5.0 technology; Gigabit LTE Advanced; GPS
13.	I/O Interface Ports	2 x USB-C; 1 * Surface Connect port; 1 * nano SIM Surface Keyboard port
14.	Operating System	Genuine Windows 11 Professional Pre-installed (with valid License)
15.	Software	Microsoft Office Professional 2021 with Genuine License Internet Security Software with valid license
16.	Battery Life	51 Whr battery
17.	Accessories	Compatible surface type cover Compatible surface keyboard Compatible digital pen Surface dock Power supply Carrying Case
18.	Warranty	One (1) Year, Proof of Warranty must be provided
	Original detailed and highlighted Brochures MUST be submitted	

TABLET COMPUTER TYPE 14		
REQUIRED MINIMUM SPECIFICATIONS		
	FEATURE	DETAILS
1.	Processor & Logic	Quad-core 12th Gen Intel® Core™ i7

2.	System Memory	16 GB
3.	Storage Subsystem	1TB SSD
4.	Form Factor	Tablet Computer
5.	Display	13" PixelSense multi-touch display
6.	Security	Enterprise-grade protection
7.	Sensors	Accelerometer; Gyroscope; Magnetometer; Ambient light sensor
8.	Graphics	Intel® Iris™ Plus Graphics
9.	Audio	Stereo speakers with Dolby Audio
10.	Camera	5.0MP front-facing camera with 1080p full HD video; 8.0MP rear-facing autofocus camera with 1080p full HD video
11.	wireless Network	Wi-Fi 6: 802.11ax compatible Bluetooth Wireless 5.0 technology
12.	I/O Interface Ports	1* USB-C; 1* USB-A; 3.5 mm headphone jack; 1 x Surface Connect port; MicroSDXC card reader
13.	Operating System	Genuine Windows 11 Professional Pre-installed (with valid License)
14.	Software	Microsoft Office Professional 2021 with Genuine license Internet Security Software with valid license
15.	Battery Life	51.5 whr battery
16.	Accessories	Compatible surface type cover Compatible surface keyboard Mobile mouse Compatible digital pen Surface dock Power supply Carrying Case
17.	Warranty	One (1) Year, Proof of Warranty must be provided
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

	TABLET COMPUTER -TYPE 15	
	ITEM	MINIMUM REQUIREMENTS
1.	Processor and core Logic	Octa Core
2.	Carrier type	WIFI; GSM / UMTS/ LTE; Bluetooth
3.	SIM	Nano-SIM
4.	System Memory	8GB(RAM) + 128GB
5.	External Memory/microSD Support	Up to 1TB

6.	ENERGY STAR® Certified	Yes
7.	Main camera Resolution	At least 13 MP with Autofocus, zoom, flash
8.	Front camera resolution	At least 8 MP
9.	Display Technology	Super AMOLED; Capacitive Multi-touch screen
10.	Display Resolution/Size	2560 x 1600 (WQXGA)/10.5'
11.	Audio	Dolby Atmos technology Audio Playing Format: MP3, M4A, 3GA, AAC, OGG, OGA, WAV, WMA, AMR, AWB, FLAC, MID, MIDI, XMF, MXMF, IMY, RTTTL, RTX, OTA
12.	Video	Video playing Resolution: UHD 8K (7680 x 4320)@30fps Format: MP4, M4V, 3GP, 3G2, WMV, ASF, AVI, FLV, MKV, WEBM
13.	Connectivity	Wi-Fi; WIFI Direct; USB C (3.1); Bluetooth v5.0; GPS; ANT+
14.	I/O Interface	USB C (3.1); 3.5mm Ear jack; AC power jack
15.	Location Technology	GPS, Glonass, Beidou, Galileo
16.	Sensors	Accelerometer; Gyro sensor; RGB light sensor; Fingerprint sensor Geomagnetic sensor; Hall sensor
17.	Stylus Support	Yes
18.	Battery	Non-removable Li-Po 7000 MAh battery
19.	Operating System	Android, latest
20.	Accessories	Carrying Case; Stylus Pen; Book cover Keyboard; Quick Start Guide; Power Adapter; USB Type-C cable
21.	Warranty	One (1) Year
Original detailed and highlighted Brochures MUST be submitted		

	RECOMMENDED MINIMUM SPECIFICATIONS	
	TABLET COMPUTER -TYPE 16	
	ITEM	MINIMUM REQUIREMENTS
1.	Processor and core Logic	Octa Core(3.0 GHz)
2.	Carrier type	WIFI; GSM / UMTS/ LTE/5G; Bluetooth
3.	SIM	Nano-SIM
4.	System Memory	8GB(RAM) + 256GB
5.	External Memory/microSD Support	Up to 1TB

6.	ENERGY STAR® Certified	Yes
7.	Main camera Resolution	At least 13 MP with Autofocus, zoom, flash
8.	Front camera resolution	At least 8 MP
9.	Display Technology	LTPS IPS LCD capacitive touchscreen
10.	Display Resolution/Size	(WQXGA) / 11'
11.	Audio	Stereo
		Audio Playing Format: MP3, M4A, 3GA, AAC, OGG, OGA, WAV, WMA, AMR, AWB, FLAC, MID, MIDI, XMF, MXMF, IMY, RTTTL, RTX, OTA
12.	Video	Video playing resolution: UHD 8K (7680 x 4320)@60fps Format: MP4, M4V, 3GP, 3G2, WMV, ASF, AVI, FLV, MKV, WEBM
13.	Connectivity	Wi-Fi; WIFI Direct; Bluetooth v5.0; USB C 3.2; GPS
14.	I/O Interface	USB Type C 3.2; 3.5mm Ear jack; AC power connector
15.	Location Technology	GPS, Glonass, Beidou
16.	Sensors	Fingerprint; accelerometer; gyro; proximity; compass
17.	Stylus support	Yes
18.	Battery	Non-removable Li-Po 8000 mah battery
19.	Operating System	Android, latest
20.	Accessories	Carrying Case; Stylus Pen; Book cover Keyboard; Quick Start Guide; Power Adapter; USB Type-C
21.	Warranty	One (1) Year
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

TABLET COMPUTER -TYPE 17		
	ITEM	MINIMUM REQUIREMENTS
1.	Processor and core Logic	Octa Core (3.0 GHz)
2.	Carrier type	WIFI; GSM / HSPA/ LTE/5G; Bluetooth
3.	SIM	Nano-SIM
4.	System Memory	8GB(RAM) + 256GB
5.	External Memory/microSD Support	Up to 1TB
6.	ENERGY STAR® Certified	Yes
7.	Main camera Resolution	At least 13 MP with Autofocus, zoom, flash

8.	Front camera resolution	At least 8 MP
9.	Display Technology	Super AMOLED Multi touch Display
10.	Display Resolution/Size	WQXGA+) /12.4'
11.	Audio	Stereo
		Audio Playing Format: MP3, M4A, 3GA, AAC, OGG, OGA, WAV, WMA, AMR, AWB, FLAC, MID, MIDI, XMF, MXMF, IMY, RTTTL, RTX, OTA
12.	Video	Video playing resolution: UHD 8K (7680 x 4320)@60fps Format: MP4, M4V, 3GP, 3G2, WMV, ASF, AVI, FLV, MKV, WEBM
13.	Connectivity	Wi-Fi; WIFI Direct; Bluetooth v5.0; USB C 3.2; GPS
14.	I/O Interface	USB Type C 3.2; 3.5mm Ear jack; AC power connector
15.	Location Technology	GPS, Glonass, Beidou
16.	Stylus Support	Yes
17.	Sensors	Fingerprint; accelerometer; gyro; proximity; compass
18.	Battery	Non-removable Li-Po 10000 mah battery
19.	Operating System	Android, latest
20.	Accessories	Carrying Case; Stylus Pen; Book cover Keyboard; Quick Start Guide; Power Adapter; USB Type-C cable
21.	Warranty	One (1) year
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 1 Heavy Duty Multi-Functional Printer (80+) - Monochrome Multifunctional digital document system with Saddle Stitch Finisher		
ITEM	REQUIREMENTS	Complied
Technology	Laser MFP	
Control panel	10.1" colour LCD touchscreen	
Duplex copying	Automatic	
Speed	Minimum 90/75 pages A4/A3 per minute	

Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 5 GB	
Processor	Dual core 1.4GHz	
Warm up time	Maximum 35 sec	
First copy time	Maximum 3.1 sec	
Hard Disk	SSD 256 GB	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25% ~ 400%	
SCAN FUNCTIONS		
Function	Email, Desktop, FTP server, Network Folder (SMB), USB, Teams Folder, OneDrive, Box, Dropbox	
Speed Minimum	280 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, XPS, JPEG, XML, text	
PRINT FUNCTIONS		
Emulations	PCL 6 emulation, Adobe PostScript 3	
Operating systems	Windows, Windows Server and Environments, Chrome OS™, Mac OS X, Unix®, Linux®, Citrix®, and SAP	
Interfaces	USB 2.0 USB 3.0, Network, wireless LAN	
Mobile printing	Android™ printing framework and Air Print	
Trays	5 paper trays including the bypass tray.	
Bypass Tray	Minimum 100 sheets	
Standard Output Tray Capacity	Minimum 250 sheets	
Document feeder capacity	Minimum 300	
Paper Weight	60 - 300 GSM	
Saddle stitch finisher	Min. 3,000 sheets, Offset, Staple, Saddle Stitch, Z-fold, C-fold	
Punch Module	Hole Punch Paper size A3 to A4 Holes: up to 4 Holes	
Max Original size	A6 - A3	
Power	110-127 VAC 60 Hz 20A	
Safety standards	International ENERGY STAR®, European RoHS, Blue Angel, EPEAT Silver, ISO 9001	

Warranty	One (1) Year	
Packaging	Toner, Main unit, Paper trays, Power cable, Pedestal, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 2 Heavy Duty Multi-Functional Printer (80+) - Monochrome Multifunctional for A3 with Punch and Finisher		
ITEM	REQUIREMENTS	Complied
Technology	Laser MFP	
Control panel	10.1" color touch screen	
Duplex copying	Automatic	
Speed	Minimum 90/45 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 5 GB	
Processor	Dual core 1.4GHz	
Warm up time	Maximum 30 sec	
First copy time	Maximum 4.0 sec	
Hard Disk	320 GB	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25% - 400%	
SCAN FUNCTIONS		
Function	Scan-to-email, Scan-to-FTP, Scan-to-SMB 3.0, Scan-to-USB Host, Scan-to-box, Network TWAIN, WSD scan	
Speed Minimum	280 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, XPS, JPEG, XML, text, rich text	
PRINT FUNCTIONS		
Emulations	PRESCRIBE, PCL6, PS3, XPS, OPEN XPS, IBM, Line Printer	
Operating systems	All current Windows operating systems, MAC OS X Version 10.9 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	Network, Hi-Speed USB 2.0, 4 USB Host Interfaces, 2 Expansion Slots, Wireless LAN	
Mobile printing	Apple Air Print®, Google Cloud Print™, Mopria®	
Trays	5 paper trays including the bypass tray	
Reversing Document Processor	Minimum 270 sheets	
Bypass Tray	Minimum 150 sheets	
Standard Output Tray Capacity	Minimum 500 sheets	
Document feeder capacity	Minimum 300	

Paper Weight	60 - 256 GSM	
Stapler finisher	Min. 4,000 sheets, Trial fold Unit	
Punch Module	Hole Punch Paper size A3 to A4 Holes: up to 4 Holes	
Max Original size	A3	
Power	120V, 60Hz, 12A; 220-240V, 50Hz, 10A	
Safety standards	International ENERGY STAR® Program Ver. 3.0, European RoHS, Blue Angel, EPEAT Silver, ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Toner, Main unit, Paper trays, Power cable, Pedestal, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 3 Heavy Duty Multi-Functional Printer (80+) - Monochrome Laser Multifunctional with Saddle Finisher and Punch Finisher		
ITEM	REQUIREMENTS	Complied
Technology	Laser Monochrome	
Control panel	Standard: 10.1" TFT LCD WSVGA Color Flat Touch-panel	
Duplex copying	Automatic	
Speed	Minimum 80/40 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 3 GB	
Processor	Dual core 1.75GHz	
Warm up time	Maximum 30 sec	
First copy time	Maximum 4 sec	
Hard Disk	Standard: 250 GB	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25% - 400%	
SCAN FUNCTIONS		
Function	Scan to e-mail, Scan to FTP, Scan to SMB, Scan to USB Host, Scan to box, Network TWAIN, WIA/WSD	
Speed Minimum	220 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, JPEG, Open XPS	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript 3, PDF Direct Print, XPS/Open XPS	
Operating systems	All current Windows operating systems, MAC OS X Version, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet, wireless LAN, NFC, Bluetooth	
Mobile printing	Mobile Print app, AirPrint	
Trays	5 paper trays including the bypass tray	
Reversing Document Processor~ min	Minimum 250 sheets	

Bypass Tray	Minimum 100 sheets	
Standard Output Tray Capacity	Minimum 250 sheets	
Document feeder capacity	Minimum 200	
Paper Weight	50-220 GSM	
Saddle stitch finisher	Min. 3,500 sheets, Collate, Group, Offset, Staple, Saddle Stitch, Hole Punch, Eco Staple, Staple On Demand, Document Insertion, Z-fold, C-fold	
Punch Module	Hole Punch Paper size A3 to A4 Holes: up to 4 Holes	
Max Original size	A3	
Power	110-127 VAC 60 Hz 16A	
Toner Life	56,000 Pages B&W for each toner	
Safety standards	ENERGY STAR Certified, Rated EPEAT Gold, ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Toner, Main unit, Paper trays, Power cable, Pedestal, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 4 Heavy Duty Multi-Functional Printer (80+) - Monochrome with Saddle Finisher and Punch Finisher		
ITEM	REQUIREMENTS	Complied
Technology:	Laser Monochrome MFP	
Control panel	Minimum 260mm full color touch panel display	
Duplex copying	Automatic	
Speed	Minimum 84/42 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 4 GB	
Processor	Dual core 1.2GHz	
Warm up time	Maximum 20 sec	
First copy time	Maximum 4.5 sec	
Hard Disk	8 GB SSD + 320 GB HDD	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25–400% in 1% steps	
SCAN FUNCTIONS		
Function	Scan to e-mail, Scan to FTP, Scan to SMB, Scan to USB Host, Scan to box, Network TWAIN, WIA/WSD, scan	
Speed Minimum	220 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, PDF/A, JPEG, Open XPS, Encrypted PDF, High compression PDF	
PRINT FUNCTIONS		
Emulations	PCL 6 (PCL 5e/PCL-XL), PostScript 3 (KPD L 3), PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet (10BaseT/100BaseTX/1000BaseT, IPv6, IPv4, IPSec, 802.3az support)	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	5 paper trays including the bypass tray.	
Reversing Document Processor~ min	Minimum 250 sheets	
Bypass Tray	Minimum 120 sheets	
Standard Output Tray Capacity	Minimum 250 sheets	

Document feeder capacity	Minimum 300	
Paper size	35-209 GSM	
Saddle stitch finisher	Min. 3,000 sheets A4 & 50 sheet staple capacity, Saddle stitch fold position: Center fold	
Punch Module	Paper size A3 to A4 Holes: up to 4 Holes	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Toner, Main unit, Paper trays, Power cable, Pedestal, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 5 Heavy Duty Multi-Functional Printer (80+) Monochrome with Finisher		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Monochrome MFP	
Control panel	Minimum 255mm full color touch panel display	
Duplex copying	Automatic	
Speed	Minimum 80/40 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 4 GB	
Processor	Dual core 1.2GHz	
Hard Disk	8 GB SSD + 320 GB HDD	
Warm up time	Maximum 30 Seconds	
First Copy out	Maximum 4.5 Seconds	
Paper weights	35-220 gsm	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25–400% in 1% steps	
SCAN FUNCTIONS		
Function	Scan to e-mail, Scan to FTP, Scan to SMB, Scan to USB Host, Scan to box, Network TWAIN, WIA/WSD scan	
Speed min	210 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, PDF/A, JPEG, Open XPS, Encrypted PDF, High compression PDF	
PRINT FUNCTIONS		
Emulations	PCL 6 (PCL 5e/PCL-XL), PostScript 3 (KPD/L 3), PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet (10BaseT/100BaseTX/1000BaseT, IPv6, IPv4, IPSec, 802.3az support)	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	5 paper trays including the bypass tray.	
Reversing Document Processor	250 sheets	
Bypass Tray	Minimum 120 sheets	

Std Output Tray Capacity	Minimum 250 sheets	
Standard Tray	Tray 1 - 500 sheets & Tray 2 - 500 sheet, Tray - 3 - 1500 sheets, Tray 4 - 1500 sheets	
Staple Finisher	Min. 4,000 sheets A4 & 50 sheet staple capacity	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Toner Life	60,000 Pages B&W for each toner	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Toner, Main unit, Paper trays, Pedestal, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 6 Heavy Duty Multifunctional Printer (80+) Color with Saddle Stitch Finisher		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Colour MFP	
Control panel	Minimum 255mm full colour touch panel display	
Duplex copying	Automatic	
Speed	Minimum 82PPM-B&W & 70-COLOUR A4 per minute/ Minimum 41PPM-B&W & 35-COLOUR A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	4 GB	
Processor	Dual core 1.2GHz	
Hard Disk	8 GB SSD + 320 GB HDD	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25–400% in 1% steps	
SCAN FUNCTIONS		
Function	Scan to e-mail, Scan to FTP, Scan to SMB, Scan to USB Host, Scan to box, Network TWAIN, WIA/WSD scan	
Speed min	210 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, PDF/A, JPEG, Open XPS, Encrypted PDF, High compression PDF	
PRINT FUNCTIONS		
Emulations	PCL 6 (PCL 5e/PCL-XL), PostScript 3 (KPDL 3), PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet (10BaseT/ 100BaseTX/ 1000BaseT, IPv6, IPv4, IPSec, 802.3az support)	
Trays	5 paper trays including the bypass tray.	
Reversing Document Processor – min	Minimum 250 sheets	
Bypass Tray – min	Minimum 120 sheets	
Output Tray Capacity - min	Minimum 400 sheets	
Staple Finisher	Min. 4,000 sheets A4 & 50 sheet staple capacity	
Max Original size	A3	
Saddle stitch finisher	Min. 4,000 sheets A4 & 50 sheet staple capacity, Saddle stitch fold position: Center fold	

Punch Module	Paper size A3 to A4 & Holes: up to 4 Holes	
Power	220-240 VAC 50/60 Hz	
Warm up time	30 Seconds max	
First Print/Copy out time	5 seconds or less	
Toner Life	65,000 Pages B&W and 25,000 Pages on Color toner	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Toner, Pedestal, Main unit, Paper trays, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 7 Heavy Duty Multi-Functional Printer (60+) - Monochrome Color Laser Multifunctional with Saddle Stitch Finisher and Punch Finisher		
ITEM	REQUIREMENTS	Complied
Technology	Laser MFP	
Control panel	10.1" TFT LCD WSVGA Color Flat-panel	
Duplex copying	Automatic	
Speed	Minimum 60/56 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 4.0 GB	
Processor	Intel Pentium G4400 (3.3 GHz)	
Warm up time	Maximum 10 sec	
First copy time	Maximum 4.0 sec	
Hard Disk	Standard: 250 GB, Maximum: 1 TB	
COPY FUNCTIONS		
Continuous copying	9999	
Zoom range	25 - 400%	
SCAN FUNCTIONS		
Function	Scan-to-email, Scan-to-FTP, Scan-to-SMB 3.0, Scan-to-USB Host, Scan-to-box, Network TWAIN, WSD scan (WIA Driver Network)	
Speed Minimum	280 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, XPS, JPEG, XML, text, rich text	
PRINT FUNCTIONS		
Emulations	PRESCRIBE, PCL6, PS3, XPS, OPEN XPS, IBM, Line Printer	
Operating systems	All current Windows operating systems, MAC OS X Version 10.9 or higher Unix, Linux as well as other operating systems on request	
Interfaces	Network, Hi-Speed USB 2.0, 4 USB Host Interfaces, 2 Expansion Slots, Wireless	
Mobile printing	Apple AirPrint®, Google Cloud Print™, Mopria®	
Trays	5 paper trays including the bypass tray.	
Reversing Document Processor	Minimum 270 sheets	
Bypass Tray	Minimum 100 sheets	

Standard Output Tray Capacity	Minimum 200 sheets	
Document feeder capacity	550 Sheets	
Paper Weight	60 - 256 GSM	
Stapler finisher	Min. 4,000 sheets, Trial fold Unit	
Punch Module	Hole Punch Paper size A3 to A4 Holes: up to 4 Holes	
Max Original size	A3	
Power	120V, 60Hz, 12A; 220-240V, 50Hz, 10A	
Safety standards	International ENERGY STAR®, European RoHS, Blue Angel, EPEAT Silver, ISO 9001	
Warranty	One (1) Year	
Packaging	Toner, Main unit, Paper trays, Power cable, Pedestal, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 8 Heavy Duty Multi-Functional Printer (60+/A4/A3) Monochrome with Finisher		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Monochrome MFP	
Control panel	9-inch full color touch panel display	
Duplex copying	Automatic	
Speed	Minimum 60/30 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 4 GB	
Processor	Dual core 1.2GHz	
Hard Disk	6 GB SSD + 300 GB HDD	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25–400% in 1% steps	
SCAN FUNCTIONS		

Function	Scan to e-mail, Scan to FTP, Scan to SMB, Scan to USB Host, Scan to box, Network TWAIN, WIA/WSD scan	
Speed minimum	220 ipm (300 dpi, A4, b/w & colour)	
Resolution	600 dpi	
File formats	TIFF, PDF, PDF/A, JPEG, Open XPS, Encrypted PDF, High compression PDF	
PRINT FUNCTIONS		
Emulations	PCL 6 (PCL 5e/PCL-XL), PostScript 3 (KPD L 3), PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet (10BaseT/100BaseTX/ 1000BaseT, IPv6, IPv4, IPSec, 802.3az support)	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	3 paper trays including the bypass tray.	
Reversing Document Processor	Minimum 300 sheets	
Bypass Tray	Minimum 120 sheets	
Output Tray Capacity	Minimum 500 Sheets	
Standard Tray	Tray 1 - 500 sheets & Tray 2 - 500 sheet	
Staple Finisher	500 Sheet	
Desk	Metal desk with storage capacity with Wheels	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Warm up time	30 Seconds max	
First Print/Copy out time	5 seconds or less	
Toner Life	30,000 Pages B&W for each toner	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 9- Heavy Duty Multi-Functional Printer (60+/A4/A3) Monochrome with Out Finisher		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Monochrome MFP	
Control panel	9inch full colour touch panel display	
Duplex copying	Automatic	
Speed	Minimum 60/30 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 4 GB	
Processer	Dual core 1.2GHz	
Hard Disk	6 GB SSD + 300 GB HDD	
COPY FUNCTIONS		
Continuous copying	1-9999	
Zoom range	25–400% in	
SCAN FUNCTIONS		
Function	Scan to e-mail, Scan to FTP, Scan to SMB, Scan to USB Host, Scan to box, Network TWAIN, WIA/WSD scan	
Speed minimum	220 ipm (300 dpi, A4, b/w & colour)	
Resolution	600 dpi	
File formats	TIFF, PDF, PDF/A, JPEG, Open XPS, Encrypted PDF, High compression PDF	
PRINT FUNCTIONS		
Emulations	PCL 6 (PCL 5e/PCL-XL), PostScript 3 (KPD L 3), PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet (10BaseT/ 100BaseTX/ 1000BaseT, IPv6, IPv4, IPSec, 802.3az support)	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	3 paper trays including the bypass tray.	
Reversing Document Processor	Minimum 300 sheets	
Bypass Tray	Minimum 120 sheets	
Output Tray Capacity	Minimum 500 Sheets	
Standard Tray	Tray 1 ~ 500 sheets & Tray 2 ~ 500 sheet	

Desk	Metal desk with storage capacity with Wheels	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Warm up time	30 Seconds max	
First Print/Copy out time	5 seconds or less	
Toner Life	30,000 Pages B&W for each toner	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 10 ~ Multi-Function Heavy Duty Color Printer (60+/A4/A3) ~ Without Finisher		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Colour MFP	
All in one function	Print, Copy, Scan	
Control panel	10inch full colour touch panel display	
Duplex copying	Automatic	
Speed	Minimum 60/30 pages A4/A3 per minute (B&W) Minimum 40/20 pages A4/A3 per minute (Color)	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 4 GB RAM	
Hard Disk	6 GB SSD & 300 GB HDD	
Processer	Dual core 1.2GHz	
COPY FUNCTIONS		
Continuous copying	Continuous copying: 1–9999	
Zoom range	25-400% in 1% steps	
SCAN FUNCTIONS		
Function	Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN, WIA , WSD scan	
Speed minimum	200 ipm (300 dpi, A4, b/w & colour)	
Resolution	600 dpi	
File formats	TIFF, PDF, PDF/A-1 , high compression PDF, encrypted PDF, JPEG, XPS	
PRINT FUNCTIONS		
Emulations	PCL 6 (PCL 5e/PCL-XL), PostScript 3 (KPD L 3), PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet (10BaseT/100BaseTX/ 1000BaseT, IPv6, IPv4, IPSec, 802.3az support)	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	3 paper trays including the bypass tray.	

Reversing Document Processor	Minimum 300 sheets	
Bypass Tray	Minimum 100 sheets	
Output Tray Capacity	Minimum 500 Sheets	
Standard Tray	Tray 1 ~ 500 sheets & Tray 2 ~ 500 sheet	
Desk	Metal desk with storage capacity with Wheels	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Warm up time	20 Seconds max	
First Print/Copy out time	6/7 seconds or less	
Toner Life	25,000 Pages B&W and 15,000 Pages on Colour toner	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 11- Medium Duty Multi-Functional Printer (40+/A4/A3) Monochrome		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology	Laser Monochrome MFP	
Control panel	Minimum 8 inch full color touch panel display	
Duplex copying	Automatic	
Speed	Minimum 40/20 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	Standard 2GB	
Processor	Dual core 1GHz	
COPY FUNCTIONS		
Continuous copying	1-999	
Zoom range	25 - 400%	
SCAN FUNCTIONS		
Function	Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN, WIA, WSD scan	
Speed	80 ipm	
Resolution	600 dpi	
File formats	TIFF, JPEG, XPS, PDF	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript 3, PDF Direct Print, XPS	
Operating systems	All current Windows operating systems, MAC OS X Version, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host, USB2.0 High Speed x1. Network, USB Host interface x4, NFC	
Mobile printing	Mobile Print app, AirPrint	
Trays	3 paper trays including the bypass tray	
Bypass Tray	Minimum 100 sheets	
Output Tray Capacity	Min 300 Sheets	
Standard Tray	Tray 1 ~ 500 sheets & Tray 2 ~ 500 sheet	
Desk	Metal desk with storage capacity with Wheels	
Max Original size	A3	
Power	100W standby mode	
Warm up time	18 Seconds	

First Print/Copy out time	3.6 seconds	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 12 Medium Duty Multi-Functional Printer (40+/A4/A3) color		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Colour MFP	
Control panel	10inch full colour touch panel display	
Duplex copying	Automatic	
Speed	Minimum 50/25 pages A4/A3 per minute B&W Minimum 40/20 pages A4/A3 per minute Color	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 4 GB RAM	
Hard Disk	6 GB SSD & 500 GB HDD	
Processer	Dual core 1.2GHz	
COPY FUNCTIONS		
Continuous copying	1 - 9999	
Zoom range	25 ~ 400%	
SCAN FUNCTIONS		
Function	Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN, WIA	
Speed minimum	120 ipm	
Resolution	600 dpi	
File formats	TIFF, PDF, JPEG, XPS	
PRINT FUNCTIONS		
Emulations	PCL, PostScript 3, PDF Direct Print, XPS	
Operating systems	All current Windows operating systems, MAC OS X Version, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet	
Mobile printing	Mobile Print app, AirPrint	
Trays	3 paper trays including the bypass tray	
Reversing Document Processor	Minimum 300 sheets	
Bypass Tray	Minimum 100 sheets	
Output Tray Capacity	Minimum 500 Sheets	
Standard Tray	Tray 1 - 500 sheets & Tray 2 - 500 sheet	
Desk	Metal desk with storage capacity with Wheels	
Max Original size	A3	

Power	220-240 VAC 50/60 Hz	
Warm up time	20 Seconds	
First Print/Copy out time	9 seconds	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

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RECOMMENDED MINIMUM SPECIFICATIONS

Type 13 - Medium Duty Multi-Functional Printer (40+/A4/A3) Monochrome		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Monochrome MFP	
Control panel	Minimum 8inch full color touch panel display	
Duplex copying	Automatic	
Speed	Minimum 40/20 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	At least 1 GB	
Processor	Dual core 1GHz	
COPY FUNCTIONS		
Continuous copying	1-999	
Zoom range	25-400% in 1% steps	
SCAN FUNCTIONS		
Function	Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN, WIA, WSD scan	
Speed	80 ipm (300 dpi, A4, b/w & colour)	
Resolution	600 dpi	
File formats	TIFF, PDF, high compression PDF, encrypted PDF, JPEG, XPS	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript 3, PDF Direct Print, XPS/OpenXPS	

Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	3 paper trays including the bypass tray.	
Reversing Document Processor	Minimum 300 sheets	
Bypass Tray	Minimum 100 sheets	
Output Tray Capacity	Min 500 Sheets	
Standard Tray	Tray 1 - 500 sheets & Tray 2 - 500 sheet	
Desk	Metal desk with storage capacity with Wheels	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Warm up time	30 Seconds max	
First Print/Copy out time	5/6 seconds or less	
Toner Life	30,000 Pages B&W for each toner	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 14 - Medium Duty Multi-Functional Printer (40+/A4/A3) color		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Colour MFP	
Control panel	10inch full colour touch panel display	
Duplex copying	Automatic	
Speed	Minimum 50/25 pages A4/A3 per minute B&W Minimum 40/20 pages A4/A3 per minute Color	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	4 GB RAM	
Hard Disk	6 GB SSD & 300 GB HDD	
Processer	Dual core 1.2GHz	
COPY FUNCTIONS		
Continuous copying	Continuous copying: 1–9999	
Zoom range	25–400% in 1% steps	
SCAN FUNCTIONS		
Function	Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN, WIA , WSD scan	
Speed minimum	200 ipm (300 dpi, A4, b/w & colour)	
Resolution	600 dpi	
File formats	TIFF, PDF, high compression PDF, encrypted PDF, JPEG, XPS	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript, PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	3 paper trays including the bypass tray.	
Reversing Document Processor	Minimum 300 sheets	
Bypass Tray	Minimum 100 sheets	
Output Tray Capacity	Minimum 500 Sheets	
Standard Tray	Tray 1 - 500 sheets & Tray 2 - 500 sheet	

Desk	Metal desk with storage capacity with Wheels	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Warm up time	20 Seconds max	
First Print/Copy out time	5 seconds or less	
Toner Life	25,000 Pages B&W and 15,000 Pages on Colour toner	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 15- Light Duty Multi-Functional Printer (30+ /A4/A3) Monochrome		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Monochrome	
Control panel	4.3inch full colour touch panel display	
Duplex copying	Automatic	
Speed	30/15 pages A4/A3 per minute	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	1 GB	
Processor	Dual core 1.2GHz	
COPY FUNCTIONS		
Continuous copying	1-999	
Zoom range	25-400% in 1% steps	
Features	Scan-once-copy-many, electronic sort, 2in1, 4in1, ID-card copy, priority print, program, continuous scan, auto cassette change, copy density control	
SCAN FUNCTIONS		
Function	Scan-to-Email, Scan-to-FTP, Scan-to-SMB, Scan to USB Host, Network TWAIN, WIA , WSD scan	
Speed minimum	50 ipm (300 dpi, A4, b/w, simplex), 50 ipm (300 dpi, A4, colour, simplex)	
Resolution	600 dpi	
File formats	TIFF, PDF, high compression PDF, encrypted PDF, JPEG, XPS	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript 3, PDF Direct Print, XPS/OpenXPS	

Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), USB Host Interface, Gigabit Ethernet	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	3 paper trays including the bypass tray.	
Reversing Document Processor	Minimum 300 sheets	
Bypass Tray	Minimum 100 sheets	
Output Tray Capacity	Minimum 500 Sheets	
Standard Tray	Tray 1 ~ 500 sheets	
Desk	1 x 500 Sheet including Cabinet	
Media Sizes	A3, A4, A5, A6, B5,	
Power	220-240 VAC 50/60 Hz	
Warm up time	30 Seconds max	
First Print/Copy out time	6/8 seconds or less	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 16 Light Duty Multi-Functional Printer (30+/A4/A3) Color		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser Color MFP	
Control panel	Minimum 4inch full color touch panel display	
Duplex copying	Automatic & Standard	
Speed	Minimum 30/15 pages A4/A3 per minute B&W Minimum 20/10 pages A4/A3 per minute Color	
Print Resolution	1200 x 1200 dpi (print), 600 x 600 dpi (scan/copy)	
Memory	1.5 GB	
Processer	Dual core 1.2GHz	
COPY FUNCTIONS		
Continuous copying	1-999	
Zoom range	25–400% in 1% steps	
SCAN FUNCTIONS		

Function	Scan to e-mail, Scan to FTP, Scan to SMB, Scan to USB Host, Scan to box, Network TWAIN, WIA/WSD scan	
Speed	50 images per minute	
Resolution	600 dpi	
File formats	TIFF, PDF, PDF/A, JPEG, Open XPS, Encrypted PDF, High compression PDF	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript 3, PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), 4 x USB Host Interface, Gigabit Ethernet	
Mobile printing	Mobile Print app for iOS and Android, AirPrint	
Trays	2 paper trays including the bypass tray.	
Reversing Document Processor	Minimum 250 sheets	
Bypass Tray	Minimum 100 sheets	
Output Tray Capacity	Minimum 250 sheets	
Standard Tray	Tray 1 ~ 500 sheets	
Max Original size	A3	
Power	220-240 VAC 50/60 Hz	
Warm up time	40 Seconds max	
First Print/Copy out time	7/8 seconds or less	
Safety standards	ISO 9001 quality standard	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 17- Desktop Monochrome Multi-Functional Printer (40+ / A4 only)		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Mono Chrome Laser	
Control panel	Minimum 4.3-inch full color touch panel display	
Duplex copying	Automatic	

Speed	40 PPM	
Print Resolution	1200 dpi	
Memory	512 MB	
Processor	800 MHz	
COPY FUNCTIONS		
Continuous copying	1-999	
Zoom range	25–400% in 1% steps	
SCAN FUNCTIONS		
Function	Scan-to-e-mail (SMTP), Scan-to-FTP (FTP over SSL), Scan-to-SMBv3, Scan to USB Host, TWAIN scan (USB, network), WSD (WIA) scan (USB, network)	
Speed minimum	40 ipm (300 dpi, A4, b/w, simplex)	
Resolution	600dpi x 600dpi,	
File formats	TIFF, PDF, high compression PDF, encrypted PDF, JPEG, XPS	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript 3, PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), USB Host Interface, Gigabit Ethernet	
Trays	2 paper trays including the bypass tray.	
ADF	Minimum 100 sheets	
Output Tray Capacity	Minimum 200 Sheets	
Standard Tray	Minimum 250 sheets	
Bypass Tray	Minimum 100 sheets	
Media Sizes	A4, A5, A6, B5, B6	
Power	220-240 VAC 50/60 Hz	
Warm up time	20 Seconds max	
First Print/Copy out time	7 seconds or less	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 18 - Desktop Multi-Functional Printer Color (20+ /A4 Only)		
ITEM	REQUIREMENTS	Complied
Technology:	Color Laser	
Control panel	5-line LCD back lit display	
Duplex copying	Automatic	
Speed	Minimum 40 PPM B&W Minimum 20 PPM color	
Print Resolution	1200 dpi	
Memory	At least 512 MB	
Processor	800 MHz	
COPY FUNCTIONS		
Continuous copying	1-999	
Zoom range	25-400%	
SCAN FUNCTIONS		
Function	Scan-to-e-mail (SMTP), Scan-to-FTP (FTP over SSL), Scan-to-SMBv3, Scan to USB Host, TWAIN scan (USB, network), WSD (WIA) scan (USB, network)	
Speed	30 ipm (300 dpi, A4, b/w, simplex), 23 ipm (300 dpi, A4, colour, simplex)	
Resolution	600 dpi	
File formats	TIFF, PDF, high compression PDF, encrypted PDF, JPEG, XPS	
PRINT FUNCTIONS		
Emulations	PCL 6, PostScript 3, PDF Direct Print, XPS/OpenXPS	
Operating systems	All current Windows operating systems, MAC OS X Version 10.5 or higher, Unix, Linux as well as other operating systems on request	
Interfaces	USB 2.0 (Hi-Speed), USB Host Interface, Gigabit Ethernet	
Trays	2 paper trays including the bypass tray.	
ADF	Minimum 50 sheets	
Output Tray Capacity	Minimum 100 Sheets	
Standard Tray	Minimum 250 sheets	
Bypass Tray	Minimum 50 sheets	
Media Sizes	A4, A5, A6, B5, B6	
Monthly Duty Cycle	Maximum 30,000 pages per month.	

Power	220-240 VAC 50/60 Hz	
Warm up time	40 Seconds max	
First Print out time	12/15 seconds or less in B&W and Color	
Warranty	One (1) Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 19- High Speed Monochrome Multi-Functional Printer		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser	
Control panel	10" LCD WSVGA	
Duplex copying	Yes	
Speed	95 ppm	
Print Resolution	1200 x 1200 dpi	
Memory	2.5 GB	
Processor	1.75 Ghz processor	
Hard Disk	300 GB HDD	
COPY FUNCTIONS		
Continuous copying	Up to 9,999 copies	
Zoom range	25% to 400%	
SCAN FUNCTIONS		
Scan Method	Scan to USB Memory Key, Scan to Mobile device	
Speed	250 ipm (BW/CL)	
Resolution	600 x 600 dpi	
Media	Support up to 220 gsm	
PRINT FUNCTIONS		
Operating systems	Windows®7/8.1/10/Server 2008/Server 2008 R2/Server 2012/Server 2012 R2/Server 2016/Server 2019, MAC OS X (10.10 or later)	
Interfaces	USB 3.0, USB 2.0, Gigabit Ethernet, Wireless LAN	
Max sheet size	330 x 487 mm	
Min sheet size	100 x 148 mm	
Supported paper weight	52 to 255 GSM	
Input Trays Capacity	4,100 sheets	
Reversing Document Processor	Minimum 250 sheets	
Output Tray Capacity	Minimum 400 sheets	
Staple Finisher	100 sheets	
Power	220-240V, 50/60Hz	
First copy out time	2.9 sec or less	

Safety	User Authentication	
Warranty	One Year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 20 ~ High Speed Color Multi-Functional Printer		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Laser	
Control panel	Minimum 10" Color Touch panel	
Duplex copying	Yes	
Speed	90 ppm	
Print/Copy Resolution	2400 x 2400 dpi	
Memory	1.5 GB	
Hard Disk	512 GB HDD	
COPY FUNCTIONS		
Continuous copying	Up to 9,999 copies	
Zoom range	25% - 400%	
SCAN FUNCTIONS		
Speed	140 ipm	
Resolution	600 x 600 dpi	
Media Gsm	Support up to 220 gsm	
PRINT FUNCTIONS		
Emulations	PCL, PS	
Interfaces	USB 2.0, Gigabit Ethernet	

Max sheet size	330 x 487 mm	
Min sheet size	100 x 148 mm	
Supported paper weight	350 gsm	
Input Tray Capacity (A4, 80 gsm)	Minimum 300 sheets	
Reversing Document Processor	Minimum 280 sheets	
Output Tray Capacity (A4, 80 gsm)	Minimum 500 sheets	
Staple Finisher	Minimum 100 sheets	
Power	220-240 V, 50/60 Hz	
First Copy out time	8 sec	
Warm Up	35 sec max	
Warranty	One year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 21 - High Speed Multi-Functional Printer color with Controller and Booklet Finisher		
ITEM	REQUIREMENTS	Complied
Make & Model		
Technology:	Color Laser Multifunctional	
Control panel	Minimum 10" Color Touch panel	
Duplex copying	Yes	
Speed	75 ppm Color	
Monthly Duty Cycle	310,000 A4 pages/month	
Print/Copy Resolution	2400 x 2400 dpi	
Memory	1.5 GB	
Processor	1.5 GB	
Hard Disk	200 GB HDD	
COPY FUNCTIONS		
Continuous copying	Up to 9,999 copies	
Zoom range	25% ~ 400%	
SCAN FUNCTIONS		
Function	Scan to USB Memory Key	
Speed	200 ipm color	
Resolution	600 x 600 dpi	
Media Gsm	Support up to 220 gsm	
PRINT FUNCTIONS		
Operating systems	Windows® 7 (64 bit) / 8.1 (64 bit) / 10 (64 bit) / Server 2012 (64 bit only) / Server 2012 R2 (64 bit only) / Server 2016 R2 (64 bit only) / Server 2019 (64 bit only), MAC OS (10.11, 10.12, 10.13, 10.14)	
Interfaces	USB, Gigabit Ethernet	
Max sheet size	330 x 487 mm	
Min sheet size	100 x 148 mm	
Supported paper weight	350 gsm	
Input Tray Capacity (A4, 80 gsm)	Minimum 300 sheets	
Reversing Document Processor	Minimum 280 sheets	
Output Tray Capacity (A4, 80 gsm)	Minimum 350 sheets	
Booklet Finisher	Minimum 20 sheets	
INTEGRATED CONTROLLER		
Type	Fiery based with latest software	

Specifications	3.2 Ghz Processor, 4 GB RAM and 500 GB HDD	
Page Description Language	PCL 6, PCL5, Adobe PDF, Encapsulated PostScript (EPS)	
Power	220-240 V, 50/60 Hz	
Warm up time from start	50 sec	
Safety standards	220-240 V , 50/60 Hz	
Warranty	One year	
Packaging	Initialization Ink Supply Units, Main unit, Paper tray, Power cable, Quick Setup Guide, User manual (CD), Warranty Documents	
Original detailed and highlighted Brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 22~ Multi-Functional Color Inkjet Printer – Heavy Duty with Staple and Booklet Finisher			
	Specifications	Requirements	Complied
Technology	Printing Technology	Inkjet	
	All-in-One Functions	Print, Copy, Scan and Fax	
	Processor	Dual Core 750 MHz	
	Hard Disk	300 GB	
	Memory	9.5 GB	
Print	Warm up Time	None	
	First Page Out from Ready	Not more than 4.9 secs	
	Printing Speed ISO	At least 100 ppm	
	Duplex Printing Speed ISO	100 A4 Pages/min Colour/ Monochrome	
	Printing Speed ISO (A3)	more than 50 ppm	
	Duplex Printing Speed ISO (A3) Minimum	50 Pages/min Colour/ Monochrome	
	Printing Resolution	600 x 2,400 DPI	
	Printing Volume	At least 400,000 pages per month	
	Expected Duty Cycle	8,000 - 100,000 pages per month	
	Colours	Black, Cyan, Yellow, Magenta	
	Consumable Page Yield (Black)	not less than 50,000 pages per consumable	
	Consumable Page Yield (Cyan, Yellow, Magenta)	not less than 50,000 pages per consumable	
Copy	Copy Quantity	1-9999	
	Copy Speed	more than 90 ipm	
	Maximum Copy Resolution	600×1200dpi	
	Reduction/Enlargement	25-400%	
	Maximum Copy Size	A3	
Scan	Scanner Type	Contact image sensor (CIS)	
	Optical Resolution	600 x 600 dpi	
	Optical Resolution (ADF)	600 x 600 dpi	
	Maximum Scan Area		
	Output formats	BMP, JPEG, TIFF, multi-TIFF, PDF, PNG	
	Color Bit Depth	16-bit color input/8-bit color output	

	Single-sided scan speed A4 colour/ black	At least 60 ipm with ADF scan	
	Doubled-sided scan speed A4 colour/ black	At least 100 ipm with ADF scan	
	Advanced document integration	Scan to Email, Scan to FTP, Scan to USB, Computer, USB Memory Device / Card	
Fax	Type of fax	Walk-up black and white and colour fax capability	
	Fax Transmission Speed	more than 30kbps	
	Error correction mode	CCITU/ITU Group3 fax with Error Correction Mode	
	Fax speed dials (max)	At least 1800 names and numbers	
	Page memory	Up to 550 pages/ 6MB t)	
	Fax Functions	PC Fax, Fax to E-mail, Memory Reception, Auto Redial, Speed Dial, Fax to Folder, Address Book	
Connectivity	Interfaces	Gigabit ethernet interface, Wireless LAN IEEE 802.11a/b/g/n, Wi-Fi Direct, USB 1.1 Type A, USB 2.0 Type A, USB 3.0 Type B, Near Field Communication (NFC)	
	WLAN Security	WEP 64 Bit, WEP 128 Bit, WPA PSK (TKIP), WPA PSK (AES)	
Paper/ Media Handling	Paper Formats	A3, A4, Postcard, A3+, A5, A6, B4, B5, B6, C4 (Envelope), C5 (Envelope), C6 (Envelope), DL (Envelope), Executive, Letter, Legal, HLT, No. 10 (Envelope), User defined	
	Automatic Document Feed	Minimum 150 pages	
	Compatible Paper Weight	64 g/m ² - 350 g/m ²	
	Duplex	Standard	
	Output Tray Capacity Minimum	550 Sheets	
	Standard paper tray(s)	more than 2000 sheets standard	
	Optional paper tray(s)	more than 2,500 sheets	
	Maximum paper input	At least 5300 sheets	
	Minimum Number of paper trays	4	
General	Energy Use (Power Consumption)	not more than 200 watt	
	ENERGY STAR® qualified	Yes	
	Supply Voltage	AC 100 V - 240 V, 50 Hz - 60 Hz	

	Power supply	220V, 240V	
	Noise Level	60 B (A)	
	Mobile and Cloud printing services	Email Print, Remote Print, Mobile Print, Mobile Scan	
	Compatible Operating Systems	Mac OS, Windows, Windows Server 2003 R2 x64, Windows Server 2008 R2, Windows Server 2016, Windows Vista (32/64 bit), Windows XP SP3, Windows XP SP3 or later (32-bit), XP Professional x64 Edition SP2	
Additional Features	Panel	Touchscreen	
	Pedestal	Pedestal with wheels	
	Media Handling	Duplex	
	Security Functions	Limit access function with Web Config, Secure confidential printing with PIN code release, LDAP Address Book, IPsec, IEEE802.1x, SSL (Server authentication), Panel Admin Mode	
	Emulations	PCL5c, PCL6, PostScript 3, PDF 1.7, PCL5e	
Staple Finisher	Stapler capable of handling 3000 sheets (two-sided)		
Booklet Finisher	Booklet finisher capable of handling at least 5 booklets		
Warranty	At Least 1 Year		
Packaging	Main unit, Ink unit, pedestal, power cables, drivers, warranty documents		
Highlighted brochures should be submitted			

RECOMMENDED MINIMUM SPECIFICATIONS

Type 23 Multi-Function Printer Monochrome Inkjet Printer~ Heavy Duty with Staple Finisher			
	Specifications	Requirements	Complied
Technology	Printing Technology	Inkjet	
	All-in-One Functions	Print, Copy, Scan and Fax	
	Processor	At least Dual Core 750 MHz	
	Hard Disk	320 GB	
	Memory	2.5 GB	
Print	Warm up Time	None	
	First Page Out from Ready	Not more than 5 secs	
	Printing Speed ISO	At least 100 ppm	
	Duplex Printing Speed ISO	100 A4 Pages/min Monochrome	
	Printing Speed ISO (A3)	more than 50 ppm	
	Duplex Printing Speed ISO (A3)	At least 34 Pages/min Monochrome	
	Maximum Printing Speed	100 pages/min Monochrome	
	Printing Resolution	600 x 2,400 DPI	
	Printing Volume	At least 400,000 pages per month	
	Expected Duty Cycle	20,000 - 100,000 pages per month	
	Colours	Black	
	Consumable Page Yield (Black)	not less than 60,000 pages per consumable	
Copy	Copy Quantity	1-9999	
	Copy Speed	more than 90 ipm (Black)	
	Maximum Copy Resolution	600×1200dpi	
	Reduction/Enlargement	25-400%,	
	Maximum Copy Size	A3	
Scan	Scanner Type	Contact image sensor (CIS)	
	Optical Resolution	600 x 600 dpi	
	Optical Resolution (ADF)	600 x 600 dpi	
	Maximum Scan Area	17" x 11.7"	
	Output formats	BMP, JPEG, TIFF, multi-TIFF, PDF, PNG	
	Color Bit Depth	16-bit color input/8-bit color output	
	Single-sided scan speed A4 colour/ black	At least 60 ipm with ADF scan	

	Doubled-sided scan speed A4 colour/ black	At least 75 ipm with ADF scan	
	Advanced document integration	Scan to Email, Scan to FTP, Scan to USB, Computer, USB Memory Device / Card	
Fax	Type of fax	Walk-up black and white and colour fax capability	
	Fax Transmission Speed	more than 30kbps	
	Error correction mode	CCITU/ITU Group3 fax with Error Correction Mode	
	Fax speed dials (max)	At least 1800 names and numbers	
	Page memory	Up to 550 pages/ 6MB (ITU-T No. 1 chart)	
	Fax Functions	PC Fax, Fax to E-mail, Memory Reception, Auto Redial, Speed Dial, Fax to Folder, Address Book	
Connectivity	Interfaces	Gigabit ethernet interface, Wireless LAN IEEE 802.11a/b/g/n, Wi-Fi Direct, USB 1.1 Type A, USB 2.0 Type A, USB 3.0 Type B, Near Field Communication (NFC)	
	WLAN Security	WEP 64 Bit, WEP 128 Bit, WPA PSK (TKIP), WPA PSK (AES)	
Paper/ Media Handling	Paper Formats	A3, A4, Postcard, A3+, A5, A6, B4, B5, B6, C4 (Envelope), C5 (Envelope), C6 (Envelope), DL (Envelope), Executive, Letter, Legal, HLT, No. 10 (Envelope), User defined	
	Automatic Document Feed	Minimum 150 pages	
	Compatible Paper Weight	up to 350g/m ²	
	Duplex	Yes	
	Output Tray Capacity Minimum	500 Sheets	
	Standard paper tray(s)	more than 2300 sheets standard	
	Optional paper tray(s)	more than 2,500 sheets	
	Maximum paper input	At least 5300 sheets	
	Rear paper path (special media)	Yes	
	Number of paper trays	Minimum 4	
General	Energy Use (Power Consumption)	not more than 200 Watt	
	ENERGY STAR® qualified	Yes	
	Supply Voltage	AC 100 V - 240 V, 50 Hz - 60 Hz	
	Power supply	220V, 240V	
	Noise Level Max	60 B (A)	

	Mobile and Cloud printing services	Email Print, Remote Print, Mobile Print, Mobile Scan	
	Compatible Operating Systems	Mac OS 10.10.x, Mac OS 10.7.x, Mac OS 10.8.x, Mac OS 10.9.x, Mac OS X 10.11.x, Mac OS X 10.12.x, Mac OS X 10.13.x, Mac OS X 10.6.8, Windows 10 (32/64 bit), Windows 7 (32/64 bit), Windows 8 (32/64 bit), Windows 8.1 (32/64 bit), Windows Server 2003 R2 x64, Windows Server 2008 R2, Windows Server 2016, Windows Vista (32/64 bit), Windows XP SP3, Windows XP SP3 or later (32-bit), XP Professional x64 Edition SP2	
Additional Features	Panel	Touchscreen	
	Media Handling	Duplex	
	Security Functions	Secure confidential printing with PIN code release, LDAP Address Book, IPsec, IEEE802.1x, SSL (Server authentication), Panel Admin Mode	
	Warranty	12 months On-site service	
	Stand	Pedestal with wheels	
	Emulations	PCL5c, PCL6, PostScript 3, PDF 1.7, PCL5e	
Staple Finisher	• Stapling - "3 positions (Corner / Opposite Corner / 2 points on side), 1 cartridge of 5,000 staples is bundled in the default state) • Supported paper thickness 60 – 160 gsm • Paper Sizes ~ A3, 11x17", B4, Legal, 8.5x13", Letter, A4, B5, Executive, A5, Half Letter, 8K (270x390), 16 K (195x270), User Defined (Width: 139.7~297mm Height: 182~431.8mm) • Output Capacity ~ Finisher Tray: 4,000 sheets (Simplex, A4, B5, Letter, 16K 195x270), 500 sheets (A5) • Paper Sizes supported for Stapling ~ A3, A4 (SEF)/(LEF), B4, B5(LEF), Legal (SEF), Letter (SEF)/(LEF), 8K (270x390 (SEF), 16K (195x270) (LEF) • Staple Position ~Front / Rear / Side (2 points)		•
Packaging	Main unit. Software, power cables, initial ink, warranty documents, software, pedestal		
Brochures	Highlighted brochures to be attached		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 24 Multi-Function Inkjet Color Printer (A3/A4) Medium duty			
	Specifications	Requirements	Complied
Technology	Printing Technology	Inkjet	
	All-in-One Functions	Print, Copy, Scan and Fax	
	Processor	At least Dual Core 750 MHz	
	Memory	4GB	
Print	Warm up Time	None	
	First Page Out from Ready	Not more than 5.5 secs	
	Printing Speed ISO	Minimum 40 ppm Mono, 25 ppm Colour	
	Duplex Printing Speed ISO	20 A4 Pages/min Monochrome, 17 A4 Pages/min Colour	
	Printing Speed ISO (A3)	20 pages/min Monochrome/ Colour	
	Duplex Printing Speed ISO (A3)	11 Pages/min Monochrome/ Colour	
	Printing Resolution	4,800 x 1,200 DPI	
	Printing Volume	At least 70,000 pages per month	
	Expected Duty Cycle	2,000 - 10,00 pages per month	
	Colours	Black, Cyan, Yellow, Magenta	
	Consumable Page Yield (Black)	not less than 80,000 pages per consumable	
	Consumable Page Yield (Cyan, Yellow, Magenta)	not less than 50,000 pages per consumable	
Copy	Copy Quantity	1 - 999	
	Copy Speed	up to 20 ipm	
	Maximum Copy Resolution	600×1200dpi	
	Reduction/Enlargement	25-400%	
	Maximum Copy Size	A3	
	Copy Quality	Color/Black-and-White: Text/Text and Image Standard/Best	
Scan	Scanner Type	Contact image sensor (CIS)	
	Optical Resolution	600 x 600 dpi	
	Optical Resolution (ADF)	600 x 600 dpi	
	Output formats	JPEG, TIFF, PDF	
	Color Bit Depth	30-bit color input/24-bit color output	

	Single-sided scan speed A4 colour/ black	At least 45 ipm with ADF, 4 sec with Flatbed scan	
	Doubled-sided scan speed A4 colour/ black	90 ipm with ADF scan	
	Advanced document integration	Scan to Email, Scan to FTP, Scan to Network folders, Scan to USB, Computer, Microsoft SharePoint, USB Memory Device / Card	
Fax	Type of fax	Walk-up black and white and colour fax capability	
	Fax Transmission Speed	more than 30kbps	
	Error correction mode	CCITU/ITU Group3 fax with Error Correction Mode	
	Fax speed dials (max)	up to 180 names and numbers	
	Page memory	Up to 550 pages/ 6MB (ITU-T No. 1 chart)	
	Fax Functions	PC Fax, Fax to E-mail, Memory Reception, Auto Redial, Speed Dial, Fax to Folder, Address Book	
Connectivity	Interfaces	Wireless LAN, USB, Wi-Fi Direct, Gigabyte Ethernet Interface, USB 3.0	
	WLAN Security	WEP 64 Bit, WEP 128 Bit, WPA PSK (TKIP), WPA2 PSK (AES), WPA2 Enterprise (AES)	
Paper/ Media Handling	Paper Formats	A4, A5, A6, B5, B6, C4, C6, DL, A3, B4, Letter, Legal	
	Automatic Document Feed	Minimum 150 pages	
	Compatible Paper Weight	up to 300g/m ²	
	Duplex	Yes	
	Output Tray Capacity Minimum	230 Sheets	
	Standard paper tray(s)	more than 350 sheets	
	Optional paper tray(s)	3 x 500-Sheet paper tray, Cabinet	
	Maximum paper input	At least 1900 sheets	
	Minimum Number of paper trays	2	
General	Energy Use (Power Consumption)	not more than 57 Watt	
	ENERGY STAR® qualified	Yes	
	Supply Voltage	AC 220 V - 240 V, 50 Hz - 60 Hz	
	Power supply	220V, 240V	

	Noise Level max	57 B (A)	
	Mobile and Cloud printing services	Apple AirPrint, Google Cloud Print	
	Compatible Operating Systems	Citrix, Linux, Mac OS, Windows OS, Windows Server	
Additional Features	Panel	Touchscreen, Direct scan-to-print without PC, Direct print from USB	
	Media Handling	Automatic duplex (A4/A3, plain paper), Portrait & Landscape printing, Rear specialty media feed, Thick Media Support	
	Security Functions	Secure confidential printing with PIN code release, LDAP Address Book, IPsec, IEEE802.1x, SSL (Server authentication), Panel Admin Mode	
	Warranty	12 months On-site service	
	Emulations	PCL6, PostScript 3, PDF 1.7, PCL5e	
Packaging	Main unit. Software, power cables, initial ink, warranty documents, software,		
Brochures	Highlighted brochures to be attached		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 25 ~ Multi-function Monochrome Inkjet Printer Light duty (A4)			
	Specifications	Requirements	Complied
Technology	Printing Technology	Inkjet	
	All-in-One Functions	Print, Copy, Scan and Fax	
	Processor	700 MHz	
	Memory	1 GB	
Print	Warm up Time	None	
	First Page Out from Ready	not more than 5 secs	
	Printing Speed ISO	Minimum 30 ppm	
	Duplex Printing Speed ISO	15 A4 Pages/min	
	Maximum Printing Speed	up to 34ppm	
	Printing Resolution	1,200 x 2,400 DPI	
	Printing Volume	At least 40,000 pages per month	
	Expected Duty Cycle	250 ~ 2,500 pages per month	
	Colours	Black	
	Consumable Page Yield	not less than 35,000 pages per consumable	
Copy	Copy Quantity	1 ~ 999	
	Maximum Copy Resolution	1200×1200dpi	
	Reduction/Enlargement	25~400%	
	Maximum Copy Size	8.5" x 14"	
	Copy Quality	Black-and-White: Standard/Best	
Scan	Scanner Type	Contact image sensor (CIS)	
	Optical Resolution	1200 x 2400 dpi	
	Optical Resolution (ADF)	1200 dpi	
	Maximum Scan Area	216 x 297 mm (8.5 x 11.7 inch)	
	Output formats	JPEG, TIFF, PDF	
	Single-sided scan speed A4 colour/ black	At least 20 ipm with ADF, 10 sec with Flatbed scan	
	Doubled-sided scan speed A4 colour/ black	1,200 DPI 2,400 dpi (with ADF); 8 ipm with ADF scan 200 dpi (flatbed)	

	Scan features	Scan to PC Scan to Cloud10 (including email) Memory Device Scan to Network Folder Password Protected PDFs	
Fax	Type of fax	Walk-up black and white and colour fax capability	
	Fax Transmission Speed	more than 30kbps	
	Error correction mode	CCITU/ITU Group3 fax with Error Correction Mode	
	Fax speed dials (max)	up to 180 names and numbers	
	Page memory	Up to 550 pages/ 6MB (ITU-T No. 1 chart	
	Fax Functions	PC Fax, Fax to E-mail, Fax to Folder, Address Book, Delay Send, Broadcast	
Connectivity	Interfaces	Wireless LAN IEEE 802.11b/g/n, Wi-Fi Direct, USB 1.1 Type A (2x), Hi-Speed USB, Ethernet Interface), Near Field Communication (NFC)	
	WLAN Security	WEP 64 Bit, WEP 128 Bit, WPA PSK (AES), WPA2 PSK (AES)	
Paper/ Media Handling	Paper Formats	C4 (Envelope), Legal, A6, A5, B5, Letter, 9 x 13 cm, 10 x 15 cm, 13 x 18 cm, A4, B6, C5 (Envelope), No. 10 (Envelope), User defined, C6 (Envelope), DL (Envelope)	
	Automatic Document Feed	Minimum 50 pages	
	Compatible Paper Weight	up to 256 g/m ²	
	Duplex	Yes	
	Output Tray Capacity Minimum	150 Sheets	
	Standard paper tray(s)	more than 300 sheets	
	Maximum paper input	At least 800 sheets	
	Rear paper path (special media)	Yes	
	Number of paper trays Minimum		
General	Energy Use (Power Consumption)	not more than 25 Watt	
	Supply Voltage	AC 220 V ~ 240 V, 50 Hz ~ 60 Hz	
	Power supply	220V, 240V	
	Noise Level Max	55 B (A)	

	Mobile and Cloud printing services	Apple AirPrint, Google Cloud Print	
	Compatible Operating Systems	Citrix, Linux, Mac OS, Windows OS, Windows Server	
Additional Features	Panel	Touchscreen, Direct Print, Direct scan-to-print without PC, Direct print from USB	
	Media Handling		
	Warranty	12 months On-site service	
	Emulations	PCL6, PostScript 3, PDF 1.7, PCL5e	
Packaging	Main Unit, Power cables, Ink units, software, warranty documents		
Brochures	Highlighted brochures to be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 26 ~Multi-Functional Color Inkjet Printer~ Light Duty (A4)			
	Specifications	Requirements	Complied
Technology	Printing Technology	Inkjet	
	All-in-One Functions	Print, Copy, Scan and Fax	
	Processor	700 MHz	
	Memory	3GB	
Print	Warm up Time	None	
	First Page Out from Ready	5 secs	
	Printing Speed ISO	Minimum 40 ppm B&W Minimum 24ppm color	
	Duplex Printing Speed ISO	15 A4 Pages/min Monochrome/Colour	
	Printing Speed	up to 34ppm	
	Printing Resolution	1,200 x 2,400 DPI	
	Printing Volume	At least 45,000 pages per month	
	Expected Duty Cycle	400 – 4,500 pages per month	
	Colours	Black, Cyan, Yellow, Magenta	
	Consumable Page Yield (Black)	not less than 50,000 pages per consumable	
	Consumable Page Yield (Cyan, Yellow, Magenta)	not less than 20,000 pages per consumable	
Copy	Copy Quantity	1 - 999	
	Copy Speed	up to 20 ipm	
	Maximum Copy Resolution	600×600dpi	
	Reduction/Enlargement	25-400%	
	Maximum Copy Size	8.5" x 14"	
	Copy Quality	Black-and-White: Standard/Best	
Scan	Scanner Type	Contact image sensor (CIS)	
	Optical Resolution	1200 x 2400 dpi	
	Optical Resolution (ADF)	1200 x 2400 dpi	
	Maximum Scan Area	216 x 297 mm (8.5 x 11.7 inch)	
	Output formats	JPEG, TIFF, PDF	
	Color Bit Depth	48-bit color input / 24-bit color output	

	Single-sided scan speed A4 colour/ black	At least 20 ipm with ADF, 10 sec with Flatbed scan	
	Doubled-sided scan speed A4 colour/ black	At least 1,200 DPI 2,400 dpi (with ADF); 60 ipm with ADF scan 200 dpi (flatbed)	
	Advanced document integration	Scan to Email, Scan to FTP, Scan to Network folders, Computer, USB Memory Device / Card	
Fax	Type of fax	Walk-up black and white and colour fax capability	
	Fax Transmission Speed	more than 30kbps	
	Error correction mode	CCITU/ITU Group3 fax with Error Correction Mode	
	Fax speed dials (max)	up to 180 names and numbers	
	Page memory	Up to 550 pages/ 6MB (ITU-T No. 1 chart)	
	Fax Functions	PC Fax, Fax to E-mail, Memory Reception, Auto Redial, Speed Dial, Fax to Folder, Address Book, Broadcast Fax	
Connectivity	Interfaces	Wireless LAN, USB, Wi-Fi Direct, Gigabyte Ethernet Interface,	
	WLAN Security	WEP 64 Bit, WEP 128 Bit, WPA PSK (AES), WPA2 PSK (AES)	
Paper/ Media Handling	Paper Formats	A4, A5, A6, B5, B6, C4, C6, DL, Letter, Legal	
	Automatic Document Feed	Minimum 50 pages	
	Compatible Paper Weight	up to 256 g/m ²	
	Duplex	Yes	
	Output Tray Capacity Minimum	150 Sheets	
	Standard paper tray(s)	more than 300 sheets	
	Other paper tray(s)	2 x 500-Sheet paper tray	
	Maximum paper input	At least 1200 sheets	
	Rear paper path (special media)	Standard	
	Number of paper trays Minimum	2	
General	Energy Use (Power Consumption)	not more than 30 Watt	
	ENERGY STAR® qualified	Yes	
	Supply Voltage	AC 220 V ~ 240 V, 50 Hz ~ 60 Hz	
	Power supply	220V, 240V	

	Noise Level Max	55 B (A)	
	Mobile and Cloud printing services	Apple AirPrint, Google Cloud Print	
	Compatible Operating Systems	Citrix, Linux, Mac OS, Windows OS, Windows Server	
Additional Features	Panel	Touchscreen, Direct Print, Direct scan-to-print without PC, Direct print from USB	
	Media Handling	ADF 2-sided copy (A4, plain paper), Automatic duplex (A4, plain paper), Portrait & Landscape printing, Thick Media Support	
	Security Functions	Limit access function with Web Config, Secure confidential printing with PIN code release, LDAP Address Book, IPsec, IEEE802.1x, SSL (Server authentication), Panel Admin Mode	
	Warranty	12 months On-site service	
	Emulations	PCL6, PostScript 3, PDF 1.7, PCL5e	
Packaging	Main unit, ink supply, power cables, software, warranty documents		
Brochure	Highlighted brochures to be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 27- Portable printer		
FEATURE	DETAILS	Complied
Printer Type	Photo Printer	
Print Technology	Inkjet	
Print Speed	Black: 20ppm, Colour:14ppm	
Supported Features	AirPrint, Auto Sheet Feeder, Borderless Printing, Document Printing, Photo Printing and Wireless Printing	
Resolution	Black:600 x 600 dpi and Color:9600 x 2400 dpi	
Paper Sizes	4 x 6, 5 x 7, Letter, Legal, U.S. #10 Envelopes	
Standard Interfaces	Wireless LAN (IEEE 802.11b/g/n), Hi-Speed USB	
Number of Nozzles minimum	Black: 300, Color: 1,500,	
Automatic Paper Sensor	Yes	
Automatic Sheet Feeder	50 Pages	

Operating System Support	Windows: Windows 10 and earlier versions Mac: Mac OS X Mobile Operating Systems: iOS, Android, Windows RT	
Weight	Less than 2 KGs	
Power	Input Voltage of 100 to 240 VAC	
External Battery	External Battery Kit should be supported and included	
Carrying case	Include Carrying case/bag	
Warranty	At least one (1) year	
Packaging	Manuals, initialization ink/toner, cables, warranty documents, battery kit, carrying case	
NB: Include Battery Kit		
Original detailed and highlighted brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 28-Impact printer – Heavy duty		
Printing Method	Impact dot matrix	Complied
Number of Pins	9 pins	
Number of columns	136 columns	
Pins	36 Needles (4 x 9)	
Print		
Printing Speed	HighSpeed-1550 chars/s, 1450 chars/s,1320 chars/s, 330 chars/s	
Carbon Copies	9 plus one original	
Printing Resolution	240 x 144 DPI	
Connectivity		
Interfaces	USB 2.0 Type B, Wired Network (optional), Bidirectional parallel, RS-232, Type B interface	
Paper / Media Handling		
Document Feed	Continuous paper front and rear, Paper output rear, bulk measurement: yes	
Paper Formats	Sheet Paper (single- and multi-layer), Continuous Paper (single- and multi-layer), Labels (single- and multi-layer)	
General		
Power consumption	185Watt, 75 Watt (standby)	
Supported Temperature	Operation 5° C - 35° C	
Supported Humidity	Operation 10% - 80%	
Compatible Operating Systems		
	Windows 2000, Windows 7, Windows 8, Windows 10, Windows 98, Windows XP	
Mean Time Between Failures	20,000 hours	
Print Head Life	200Million Strokes/Wire	
Noise	Operation: 58 dB (A)	
Memory	128 kB Included	
Ribbon Yield	15000000 characters Black Draft	
Packaging	Driver and utilities (CD), Main unit, Power cable, Ribbon, Setup guide, Software (CD), User manual (CD), Warranty document	
Original detailed and highlighted brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 29 Impact Printer - Medium duty		
Printing Method	Impact dot matrix	Complied
Number of Pins	24 pins	
Number of columns	106 columns	
Pins	24 Needles	
Print		
Printing Speed	HighSpeed-440 chars/s, 529 chars/s, 330 chars/s, 396 chars/s, 110 chars/s, 132 chars/s	
Barcodes	Coda bar (NW-7), Code 128, Code 39, EAN-13, EAN-8, Industrial 2 of 5, Interleaved 2 of 5, Matrix 2 of 5, POSTNET, UPC-A, UPC-E	
Carbon Copies	6 plus one original	
Character Tables	PC437, PC708, PC720, PC850, PC858, PC864, PCAR864, ISO-8859-15, Roman 8, Italic	
Printing Resolution	360 x 180 DPI	
Connectivity		
Interfaces	USB 2.0 Type B, Bidirectional parallel	
Paper / Media Handling		
Document Feed	Single sheet front, Continuous paper rear, Paper output front	
Paper Formats	Sheet Paper (single- and multi-layer), Continuous Paper (single- and multi-layer), Labels (single- and multi-layer), Roll Paper, Envelopes, Cardboard	
Paper Thickness Continuous Paper	0.065 mm - 0.49 mm	
Paper Thickness Label Base Sheet	0.16 mm - 0.19 mm	
Paper Thickness Label Total Sheet	0.16 mm - 0.19 mm	
Paper Thickness Multi Part	0.12 mm - 0.49 mm	
Paper Thickness Single Sheet	0.065 mm - 0.19 mm	
General		
Power consumption	38Watt, 3 Watt (standby)	
Product dimensions		
Supported Temperature	Operation 5° C ~ 35° C	

Supported Humidity	Operation 10% ~ 80%	
Compatible Operating Systems	Windows 2000, Windows 7, Windows 8, Windows 10, Windows 98, Windows XP	
Mean Time Between Failures	20,000 hours	
Print Head Life	400Million Strokes/Wire	
Noise	Operation: 57 dB (A)- Standby: 54 dB (A)	
Fonts	Bitmap font Courier (10 CPI, 12 CPI, 15 CPI), Bitmap font Draft (10 CPI, 12 CPI, 15 CPI), Bitmap font OCR-B (10 CPI), Bitmap font Orator (10 CPI), Bitmap font Orator-S (10 CPI), Bitmap font Prestige (10 CPI, 12 CPI), Bitmap font Roman (10 CPI, 12 CPI, 15 CPI, Proportional), Bitmap font Sans Serif (10 CPI, 12 CPI, 15 CPI, Proportional), Bitmap font Script (10 CPI), Bitmap font Script C (Proportional), Scalable font Roman, Scalable font Roman T, Scalable font Sans Serif, Scalable font Sans Serif H	
Memory	128 kB Included	
Ribbon Yield	10000000 characters Black Draft	
Packaging	Driver and utilities (CD), Main unit, Power cable, Ribbon, Setup guide, Software (CD), User manual (CD), Warranty document	
Warranty	At least 1 year	
Original detailed and highlighted brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 30 Impact Printer - Light Duty		
Printing Method	Impact dot matrix	Complied
Number of Pins	24 pins	
Number of columns	136 columns	
Pins	24 Needles	
Print		
Printing Speed	High Speed: 550 chars/s, Draft: 10 cpi: 495 chars/s, 12 cpi: 594 chars/s, LQ: 10 cpi: 165 chars/s	
Carbon Copies	7 plus one original	
Printing Resolution	360 x 180 DPI	
Connectivity		
Interfaces	Type B interface, Wired Network (optional), USB 2.0 Type B, Bidirectional parallel, RS-232 (optional)	
Paper / Media Handling		
Document Feed	Single sheet front, Continuous paper rear, Paper output front, bulk measurement: yes, Optional Automatic Document Feed (CSF): 150	
Paper Formats	Sheet Paper (single- and multi-layer), Continuous Paper (single- and multi-layer), Labels (single- and multi-layer), Roll Paper, Envelopes, Cardboard	
General		
Power consumption	85Watt, 8 Watt (standby)	
Supported Temperature	Operation 10% - 80%Operation 5° C - 35° C	
Supported Humidity		
Compatible Operating Systems	Windows 2000, Windows 7, Windows 8, Windowsn10, Windows 98, Windows XP	
Mean Time Between Failures	10,000 hours	
Print Head Life	400Million Strokes/Wire	
Noise	Operation: 59 dB (A)	
Memory	128 kB Included	
Noise Level	Operation: 59 dB (A)	
Ribbon Yield	9000000 characters Black Draft, 6000000 characters Black LQ	
Warranty	At least one (1) year	
Packaging	Driver and utilities (CD), Main unit, Power cable, Ribbon, Setup guide, Software (CD), User manual (CD), Warranty document	

RECOMMENDED MINIMUM SPECIFICATIONS

Type 31 ~ Wide Format Printer/ Scanner			
	Specifications	Requirements	Complied
	Technology	Inkjet Technology	
TECHNOLOGY	All-in-One Functions	Print, Scan, Copy	
PRINT	First Page Out	not more than 24secs	
	Colors	Black, Cyan, Yellow, Magenta	
	Colors Capacity minimum	Black [100ml, 300ml]	
	Minimum Droplet Size	4 pl,	
	Print from	PC, MAC, Mobile Device, USB	
	Nozzle Configuration	800 Nozzles Black, 800 Nozzles per Color	
	Printing Resolution	2,400 x 1,200 DPI	
PAPER / MEDIA HANDLING	Paper Formats	A1, A2, A2+, A3+, A3, A4, B1, B2, B3, B4, B5, 17 " (43.2 cm), 24 " (61.0 cm), A0, 36 " (91.4 cm)	
	Print Margins Sheet Media	Mode 1: 3 mm (top), 3 mm (right), 20 mm (bottom), 3 mm (left)	
	Print Margins Roll Media	Mode 1: 3 mm (top), 3 mm (bottom)	
	Compatible Paper Thickness	At least 0.3mm	
	Borderless printing on	10 inches, 11.81 inches, 12.99 inches, 15.98 inches, 17.01 inches, 20.28 inches, 23.39 inches, 24.02 inches, 28.66 inches, 33.11 inches, 35.98 inches	
GENERAL	Power consumption	no more than 40W	
	Supply Voltage	AC 100 V ~ 240 V, 50 Hz ~ 60 Hz	
	Sound Power max	Operation: 7.5 B (A)	
	Mobile and Cloud printing services	Apple AirPrint	
	Noise Level max	Operation: 55 dB (A) ~ Standby: 35dB (A)	
	Other extras	Document carrier sheet A0, Cover Plus warranty extensions	
OTHER FEATURES	Memory	1 GB	
	Emulations	HP-GL2, RTL	
	Features	Direct print from USB	

	Optional Software & Solutions		
	Security	LS, SSL, IEE 802, IPsec, IPv6	
OTHER	Compatible Operating Systems	MAC OS, Windows OS	
	Interfaces	USB 3.0, Gigabit ethernet interface, Wireless LAN IEEE 802.11b/g/n, Wi-Fi Direct	
	Media Handling	Automatic Cutter, Roll paper	
SCAN	Destinations	Direct to Print, electronic file: send by email (SMTP)	
	Advanced document integration	Scan to Email, Scan to FTP, Scan to Network folders, Scan to USB, USB Memory Device /Card	
	Output formats	JPEG, TIFF, PDF	
	Scanner type	Contact image sensor (CIS)	
	Light Source	LED	
	Media width	38" (153mm to 965.2mm)	
	Scan width	36" (153mm to 914.4mm)	
	Optical Resolution	600 DPI x 600 DPI	
	Scanning Speed min	4.0 inch/sec (Colour, Single-sided, 200 dpi; 7.0 inch/sec (Monochrome, Single-sided, 200 dpi;	
COPY	Reduction / Enlargement	25 % - 400 %	
	Maximum number of copies	99	
	Thickness	up to 0.8mm	
WARRANTY	Warranty	24 months On-site service	
Packaging	Packing	Ink supply unit, main unit, power cables, Drivers	
Original detailed and highlighted brochures MUST be submitted			

RECOMMENDED MINIMUM SPECIFICATIONS

Type 32 Professional Photo Printer			
	Specifications	Requirements	Complied
TECHNOLOGY	Printing Technology	Inkjet Technology	
PRINT	Colors	Photo Black, Matte Black, Cyan, Light Cyan, Yellow, Vivid Magenta, Vivid Light Magenta, Violet, Grey, Light Grey	
	Ink tank capacity	Min 45pl	
	Minimum Droplet Size	1.3 pl, With Variable-Sized Droplet Technology	
	Nozzle Configuration	180 Nozzles Black, 180 Nozzles per Color	
	Printing Resolution	5,760 x 1,440 DPI	
PAPER / MEDIA HANDLING	Paper Formats	A3+, A3, A4, A5, 9 x 13 cm, 13 x 18 cm, 20 x 25 cm, 13 x 20 cm, Letter, Letter Legal, Postcard, 100 x 148 mm, 10 x 15 cm, User defined, A2, A2+	
	Paper Tray Capacity	At least 120 sheets	
	Compatible Paper Thickness	At least 1.4mm	
	Duplex	No	
	Number of paper trays	Minimum 2	
GENERAL	Power consumption	not more than 25W	
	Supply Voltage	AC 100 V - 240 V, 50 Hz - 60 Hz	
	Mobile and Cloud printing services	Apple AirPrint, Google Cloud Print	
	Noise Level Maximum	Operation: 45 dB (A)	
OTHER FEATURES	Panel	Touchscreen	
OTHER	Compatible Operating Systems	Mac OS, Windows OS	
	Interfaces	USB 3.0, Ethernet interface (100 Base-TX / 10 Base-T), Wireless LAN IEEE 802.11a/b/g/n/ac, Wireless LAN b/g/n (2.4GHz), Wireless LAN a/n (5GHz), Wi-Fi Direct	
	Media Handling	Borderless print, Portrait printing, Landscape printing, Roll Paper	
WARRANTY	Warranty	12 months On-site service	
General	Packaging	All manuals, power cables, initialization ink, main unit, warranty documents	
Original detailed and highlighted brochures MUST be submitted			

RECOMMENDED MINIMUM SPECIFICATIONS

Type 33 - Photo Printer Wide Format			
	Specifications	Requirements	Complied
TECHNOLOGY	Printing Technology	Inkjet Technology	
PRINT	Colors	Light Black, Light Black, Photo Black, Matte Black, Cyan, Light Cyan, Yellow, Vivid Magenta, Vivid Light Magenta, Orange, Green	
	Nozzle Configuration	360 Nozzles black, 360 Nozzles per color	
	Ink tank capacity	Minimum 650 ml	
	Minimum Droplet Size	3.5 pl	
PAPER / MEDIA HANDLING	Print Margins Sheet Media	Mode 1: 3 mm (top), 3 mm (right), 14 mm (bottom), 3 mm (left)	
	Compatible Paper Thickness	At least 1.4mm	
	Paper Formats	A0, A1, A2, A3+, A3, A4, B1, B2, B3, B4, 17 " (43.2 cm), 24 " (61.0 cm), 44 " (111.8 cm), User defined, B0	
	Duplex	No	
	Borderless printing on	254 mm, 300 mm, 329 mm, 406 mm, 432 mm, 515 mm, 594 mm, 610 mm, 914 mm, 1118 mm	
GENERAL	Energy Use	no more than 78W	
	Supply Voltage	AC 100 V - 240 V, 50 Hz - 60 Hz	
	Sound Power	Operation: 6.5 B (A) Max	
	Noise Level	Operation: 48 dB (A) Maximum	
OTHER FEATURES	Memory	1 GB	
OTHER	Media Handling	Roll paper, Thick Media Support	
	Compatible Operating Systems	Linux, Mac OS, Windows OS, Windows Server	
OTHER	Warranty	12 months On-site service	
	Packaging	Ink supply units, main unit, power cables, connecting cables	
Original detailed and highlighted brochures MUST be submitted			

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RECOMMENDED MINIMUM SPECIFICATIONS

Type 34 ~ Label Printer		
Specifications	Requirements	Complied
Printing technology	Thermal transfer	
Tape width	6 mm, 9 mm, 12 mm, 18 mm, 24 mm, 36 mm	
Printing resolution	360 DPI	
Print speed	35 mm/sec	
Repeat printing	1 - 999	
Barcodes	Code 128, Code 39, Data Matrix, EAN-128, EAN-13, EAN-8, GS1-128, GS1-DataBar, ITF, Maxi Code, PDF417, QR Code, UPC-A, UPC-E	
Fonts	Depending on user's PC	
Symbols	466	
Last Label	View history, Browse	
Interface	Wired LAN (100 Base-TX / 10 Base-T), Wireless LAN IEEE 802.11b/g/n, Wi-Fi Direct, USB 2.0 Type B	

Operating System	Android, Mac, IOS, Windows	
Warranty	1 Year	
Packaging	Main unit, software, power cable, interface cable, warranty documents	
Original detailed and highlighted brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 35 – Label Printer		
Specifications	Requirements	Complied
Print method	Thermal line printing	
Printing font	ANK	
Column capacity (columns) Standard	At least paper width 80mm	
Character size (mm)	1.5 mm (W) x 3 mm (H) / 1.1 mm (W) x 2.1 mm (H)	
Character set	95 Alphanumeric, 18 set International, 128 x 7 Graphic	
Characters per inch	At least 22.6 cpi / 16.9 cpi	
Interfaces	USB 2.0 Type B, RS-232	
Receive data buffer	4 KB or 45 bytes	
Print speed	At least 150 mm/sec	
Paper Dimensions (mm)	79.50 ± 0.50 (W) mm x dia 90.00 mm	
Power	100 ~ 240V AC, 50 / 60 Hz	
Power Supply	External (AC cable included)	
Printer mechanism life	more than 15 million lines	
Auto cutter life	more than 1.5 million cuts	
MTBF	At least 350,000 hours	
MCBF	At least 65,000,000 lines	
EMC standards	VCCI class A, FCC class A, CE marking, AS / NZS 3548	
Safety standards	UL, CSA, TÜV	
Standard Accessories	Label paper roll, Main unit, PS-180, Panel label for horizontal installation, Paper exit guide, Paper roll spacer, Power switch cover, User manual	
Packaging	Main unit, software, power cable, interface cable, warranty documents	
Brochures	Original detailed and highlighted brochures MUST be submitted	

RECOMMENDED MINIMUM SPECIFICATIONS

Type 36 Receipt Printer		
Model Name	GENERIC SPECIFICATIONS	Complied
Print method	Thermal line printing	
Printing font	ANK	
Column capacity (columns) Standard	At least Paper width 80 mm	
Character size (mm)	0.99 mm (W) x 2.4 mm (H) / 1.41 mm (W) x 3.39 mm (H)	
Character set	95 Alphanumeric, 18 set International, 128 × 43 Graphic	
Characters per inch min.	20 cpi / 15 cpi	
Interfaces	USB, Drawer kick-out, RS-232	
Receive data buffer	4 KB or 45 bytes	
Print speed	At least 250 mm/sec	
Paper Dimensions (mm)	79,50 ± 0,50 (W) mm x dia 83,00 mm	
Power	100 - 240V AC, 50 / 60 Hz	
Power Supply	External (AC cable included)	
Printer mechanism life	At least 15 million lines	
Auto cutter life	At least 1.4 million cuts	
MTBF	At least 350,000 hours	
MCBF	At least 60,000,000 lines	
Print Head life minimum	120 km - 120.000.000 pulses	
EMC standards	CE marking, GOST-R, EN55022 Class A	
Options	Connector Cover	
Packaging	CD Manual, Main unit, PS-180 & AC cable, Power switch cover, Roll paper, Setup guide, Warranty Documents, Connecting cables	
Warranty	1 Year	
Original detailed and highlighted brochures MUST be submitted		

RECOMMENDED MINIMUM SPECIFICATIONS

Type 37 ~ ALL IN ONE MONOCHROME PRINTER, SCANNER, COPIER- Medium Speed		
Model Name	GENERIC SPECIFICATIONS	Complied
Type	Desktop	
Engine speed	A4 (846 ppm, A3 (11" x 17"): Max. 22 ppm	
Control display panel	7.0-inch colour LCD touchscreen	
Paper size	Max. A3 wide (12" x 18") *3, min. A5 (5 1/2" x 8 1/2") *4	
Paper capacity	Standard: 1000 sheets (500-sheet x 2 trays and 100-sheet multi-bypass tray)	
Paper weight	Tray: 60 g/m ² to 220 g/m ² , multi-bypass tray: 55 g/m ² to 300 g/m ²	
Warm-up time	12 sec.	
Memory	2GB (copy/print shared)	
Power requirements	Rated local AC voltage $\pm$ 10%, 50/60 Hz	
Power consumption	Max. 1.84 kW (220 V to 240 V), Max. 1.44 kW (100 V to 127 V)	
Dimensions (W x D x H)	608 x 690 x 837 mm	
Weight (approx.)	66 kg	
Copier		
Original paper size	Max. A3 (11" x 17") 3.7/	
First copy time	3.9 sec.	
Continuous copy	Max. 999 copies	
Resolution	Scan: 600 x 600 dpi, 600 x 400 dpi, 600 x 300 dpi* Print: 600 x 600 dpi, 9,600 (equivalent) x 600 dpi	
Gradation	Scan: 256 levels Print: 256 levels (equivalent)	
Zoom range	25% to 400 % (25% to 200% using RSPF) in 1% increments	
Preset copy ratios	Metric: 10 ratios (5R/5E), inch: 8 ratios (4R/4E)	
Color Scanner		
Scan method	Push scan (via control panel)	
Resolution	100, 200, 300, 400, 600 dpi	
File formats	TIFF, PDF, PDF/A, XPS	
Scan destination	Scan to USB drive	

Network Printer		
Resolution	600 x 600 dpi, 9,600 (equivalent) x 600 dpi	
Interface	USB 2.0, 10Base-T/100Base-TX/1000Base-T	
Supported OS	Windows Server® 2008, Windows Server® 2008 R2, Windows Server® 2012, Windows Server® 2012 R2, Windows Server® 2016. Windows Vista, Windows 7, Windows 8.1, and Windows 10	
Network protocols	TCP/IP (IPv4), IPX/SPX (NetWare)	
Printing protocols	LRP, Raw TCP (port 9100), POP3 (e-mail printing), HTTP, FTP for downloading print files, IPP	
PDL	PCL 6 emulation	
Available fonts	80 fonts for PCL	
Warranty	1 Year	

RECOMMENDED MINIMUM SPECIFICATIONS

Type 38: ALL IN ONE PRINTER, SCANNER, COPIER – High Speed		
Model Name	GENERIC SPECIFICATIONS	Complied
Type	Desktop	
Colour	Monochrome	
Control panel display	Minimum 7.0-inch color touchscreen	
Paper sizes	Tray 2: A3 (11" x 17") to A5R (5-1/2" x 8-1/2"R) Tray 3/4: A4 (8-1/2" x 11")	
Paper capacity	Tray 2: 500 Tray 3: 1,150 Tray 4: 850	
Paper weight	Tray 2: 60 g/m ² (16 lbs. bond) to 220 g/m ² (80 lbs. cover) Tray 3/4: 60 g/m ² (16 lbs. bond) to 105 g/m ² (28 lbs. bond)	
Warm-up time	Maximum 12 seconds	
Memory	Standard: 2 GB	
Power requirements	Local voltage ± 10 %	

Power consumption	Max. 1.84 kW (220-240 V)/1.44 kW (100-127 V)	
Ambient environment	Operating: 10° C (54° F) to 35° C (91° F) (20% to 85 % RH) 590-1013 hPa Standard: 20° C (68° F) to 25° C (77° F) (65 ± 5% RH)	
Dimensions (W x D x H)	608 mm (W) x 690 mm (D) x 837 mm (H)	
Weight (approx.)	65 kg (143.3lbs)	
Copier		
Copier system	Laser electrostatic copier	
Original paper size	Max. A3 (11" x 17")/sheets, bound documents.	
First-copy time	Minimum 3.7 seconds	
Continuous copy	Max. 999 copies	
Continuous copying speeds* (when shifter is not in operation)	A4, B5, 8-1/2" x 11" – 56 copies/min. A4R, 8-1/2" x 11"R, B5R, 71/4" x 10-1/2"R – 35 copies/min. B4, 8-1/2" x 14" – 30 copies/min. A3, 11" x 17" – 26 copies/min.	
Resolution	Scan: 600 x 600 dpi, 600 x 400 dpi, 600 x 300 dpi Print: 600 x 600 dpi, 9,600 (equivalent) x 600 dpi	
Gradation	256 levels	
Zoom range	25% to 400% (25% to 200% using RSPF) in 1% increments	
Preset copy ratios	Metric: 10 ratios (5R/5E), inch: 8 ratios (4R/4E)	
Color Scanner		
Scan method	Push scan (via control panel)	
Resolution	Scan (Document glass): 600 x 600 dpi, 600 x 400 dpi, 600 x 300 dpi Scan (Document feeder): 600 x 600 dpi, 600 x 400 dpi Print: 600 x 600 dpi, equivalent to 9600 x 600 dpi	
File formats	(B/W) TIFF, PDF, PDF/A, XPS Compression method: decompression, G3 (MH), G4 (MMR) (Grey scale/colour) TIFF, JPEG, PDF, PDF/A, XPS Compression method: JPEG (high, mid, and low compression)	
Scan destination	Scan to USB drive	
Network Printer		

Type	Built-in type	
Continuous print speed	Same as continuous copy speed	
Resolution	Data processing: 600 x 600 dpi Print: 600 x 600 dpi, equivalent to 9600 x 600 dpi	
Page language description	Standard: PCL6 emulation	
Interface	10BASE-T/100BASE-TX/100BASE-T, USB 2.0 (high speed mode)	
Supported OS	Windows Server 2003, Windows Vista, Windows Server 2008, Windows 7, Windows 8.1, Windows Server 2012	
Network protocols	TCP/IP (IPv4/IPv6), IPX/SPX	
Memory	Machine system memory	
Available fonts	80 fonts for PCL	
WARRANTY	Minimum 1 YEAR	

RECOMMENDED MINIMUM SPECIFICATIONS

Type 39 - Departmental Medium DUTY MULTIFUNCTIONAL COLOUR MFP (50 + /A4/A3)		
ITEM	REQUIREMENTS	Complied
Technology	Laser Color MFP	
Engine speed	A4- Minimum 50ppm, A3 – Minimum 26 ppm	
Control panel display	10.1-inch color LCD touchscreen	
Paper size	Max. SRA 3, Min. A5	
Trays	3 paper Trays including Bypass Tray	
standard Tray	Minimum 550 sheets x 2 Trays	
Bypass Tray	Minimum 100 sheets	
Reverse Document Feeder	Minimum 100 sheets	
Paper weight	Tray: 60 g/m ² to 220 g/m ² , multi-bypass tray: 55 g/m ² to 300 g/m ²	
Warm-up time Maximum	Colour 31 sec & B/W 26 sec.	
First copy time Maximum	Colour 4.8sec, B/W 3.7 sec	
Memory	5GB (copy/print shared)	
Duplex copying	Automatic	
Power	Rated local AC voltage (220V to 240v) ±10%, 50/60 Hz	
Power consumption	Max. 2.07 kW (220 V to 240 V)	
Desk	Movable stand included	
Toner Starter	Included	
Auto Power shutoff Mode	included	
Copier Functions		
Original paper size	Max. A3	
Continuous copy	Max. 9999 copies	
Resolution	Scan (colour): 600 x 600 dpi, scan (B/W):600 x 600 dpi ,600 x 400 dpi	
	Print (colour): 600 x 600 dpi; 9,600 (equivalent) x 600 dpi	
	Print (B/W): 600 x 600 dpi; 9,600 (equivalent) x 600 dpi	
Gradation	Scan: 256 levels	
	Print: 256 levels (equivalent)	
Zoom range	25% to 400% (25% to 200% using RSPF) in 1% increments	

Preset copy ratios	Metric: 10 ratios (5R/5E), inch: 8 ratios (4R/4E)	
Colour scanner Functions		
Scan method	Push scan (via control panel)	
	Pull scan (TWAIN-compliant application)	
Scan speed	Colour & B/W: Max. 80 originals/min.	
Resolution	Push scan: 100, 150, 200, 300, 400, 600 dpi	
	Pull scan: 75, 100, 150, 200, 300, 400, 600 dpi	
File formats	TIFF, PDF, PDF/A, XPS	
Scan destination	Scan to e-mail/FTP server/network folder (SMB)/ USB drive	
Network Printer Functions		
Resolution	600 x 600 dpi, 9,600 (equivalent) x 600 dpi	
Interface	USB 2.0, 10Base-T/100Base-TX/1000Base-T	
Supported OS	Windows Server® 2008, Windows Server® 2008 R2, Windows Server® 2012, Windows Server® 2012 R2, Windows Server® 2016, Windows Vista®, Windows® 7, Windows® 8.1, Windows® 10, Mac OS 10.9,10.10,10.11,10.12,10.13,10.14,10.15	
Network protocols	TCP/IP (IPv4), IPX/SPX (NetWare)	
Printing protocols	LPR, Raw TCP (port 9100), POP3 (e-mail printing), HTTP, FTP for downloading print files, IPP	
PDL	PCL 6 emulation, Adobe PostScript 3	
Available fonts	80 fonts for PCL ,139 fonts for Adobe postscript 3	
Warranty	Minimum One Year	

RECOMMENDED MINIMUM SPECIFICATIONS

Type 40 ~ Departmental Light Duty Multifunctional Color MFP (40 + /A4/A3)		
ITEM	REQUIREMENTS	Complied
Technology	Laser Color MFP	
Engine speed	A4- Max 40ppm, A3 - Max.19 ppm	
Control panel display	Minimum 10.1-inch color touchscreen	
Paper size	Max. SRA3, Min. A5	
Trays	3 paper Trays including Bypass Tray	
standard Tray	550 sheets x 2 Trays	
Bypass Tray	Minimum 100 sheets	
Reverse Document Feeder	Minimum 100 sheets	
Paper weight	Tray: 60 g/m ² to 220 g/m ² , multi-bypass tray: 55 g/m ² to 300 g/m ²	
Warm-up time Maximum	Colour & B/W 20 sec.	
First copy time Maximum	Colour 6.7 sec, B/W 4.7 sec	
Memory	5GB (copy/print shared)	
Duplex copying	Automatic	
Power	Rated local AC voltage (220V to 240v) $\pm 10\%$, 50/60 Hz	
Power consumption	Max. 1.84 kW (220 V to 240 V)	
Desk	Movable stand included	
Toner Starter	Included	
Auto Power shutoff Mode	included	
Copier Functions		
Original paper size	Max. A3	
Continuous copy	Max. 9999 copies	
Resolution	Scan (colour): 600 x 600 dpi, scan (B/W):600 x 600 dpi ,600 x 400 dpi	
	Print (colour) : 600 x 600 dpi ; 9,600 (equivalent) x 600 dpi	
	Print (B/W): 600 x 600 dpi; 9,600 (equivalent) x 600 dpi	
Gradation	Scan: 256 levels	
	Print: 256 levels (equivalent)	
Zoom range	25% to 400% (25% to 200% using RSPF) in 1% increments	
Preset copy ratios	Metric: 10 ratios (5R/5E), inch: 8 ratios (4R/4E)	
Color scanner Functions		
Scan method	Push scan (via control panel)	

	Pull scan (TWAIN-compliant application)	
Scan speed	Color & B/W: Max. 80 originals/min.	
Resolution	Push scan: 100, 150, 200, 300, 400, 600 dpi	
	Pull scan: 75, 100, 150, 200, 300, 400, 600 dpi	
File formats	TIFF, PDF, PDF/A, XPS	
Scan destination	Scan to e-mail/FTP server/network folder (SMB)/ USB drive	
Network Printer Functions		
Resolution	600 x 600 dpi, 9,600 (equivalent) x 600 dpi	
Interface	USB 2.0, Gigabit ethernet	
Supported OS	Windows Server® 2008, Windows Server® 2008 R2, Windows Server® 2012, Windows Server® 2012 R2, Windows Server® 2016, Windows Vista®, Windows® 7, Windows® 8.1, Windows® 10, 11, Mac OS 10.9,10.10,10.11,10.12,10.13,10.14,10.15	
Network protocols	TCP/IP (IPv4), IPX/SPX (NetWare)	
Printing protocols	LPR, Raw TCP (port 9100), POP3 (e-mail printing), HTTP, FTP for downloading print files, IPP	
PDL	PCL 6 emulation, Adobe PostScript 3	
Available fonts	80 fonts for PCL ,139 fonts for Adobe postscript 3	
Warranty	Minimum One Year	

RECOMMENDED MINIMUM SPECIFICATIONS

Type 41 ~ Departmental Heavy Duty Multifunctional MFP (60 + /A4/A3) Monochrome with Finisher		
ITEM	REQUIREMENTS	Complied
Technology	Laser Monochrome MFP	
Engine speed	A4- Minimum 60ppm, A3 - Minimum 28 ppm	
Control panel display	Minimum 10.1-inch color LCD touchscreen	
Paper size	Max. A3 wide, Min. A5	
Trays	3 paper Trays including Bypass Tray	
Standard Tray	Minimum 550 sheets x 2 trays	
Bypass Tray	Minimum 100 sheets	
Reverse Document Feeder	Minimum 300 sheets	
Paper weight	Tray: 60 g/m ² to 220 g/m ² , multi-bypass tray: 55 g/m ² to 300 g/m ²	
Warm-up time	Maximum 35 sec.	
First copy time	Maximum 4 sec.	
Memory	5GB (copy/print shared)	
Hard disk	Minimum 500GB	
Duplex copying	Automatic	
Power	Rated local AC voltage (220V to 240V) $\pm 10\%$, 50/60 Hz	
Power consumption	Max. 1.84 kW (220 V to 240 V)	
Account Control	Min 750 Accounts	
Desk	Movable stand included	
Toner Starter	Included	
Auto Power shutoff Mode	included	
Copier Functions		
Original paper size	Max. A3	
Continuous copy	Max. 9999 copies	
Resolution	Scan: 600 x 600 dpi, 600 x 400 dpi, 600 x 300 dpi	
	Print: 600 x 600 dpi, 9,600 (equivalent) x 600 dpi	
Gradation	Scan: 256 levels	
	Print: 256 levels (equivalent)	
Zoom range	25% to 400% (25% to 200% using RSPF) in 1% increments	
Preset copy ratios	Metric: 10 ratios (5R/5E), inch: 8 ratios (4R/4E)	
Color scanner Functions		

Scan method	Push scan (via control panel)	
	Pull scan (TWAIN-compliant application)	
Scan speed	Color & B/W: Max. 80 originals/min.	
Resolution	Push scan: 100, 150, 200, 300, 400, 600 dpi	
	Pull scan: 75, 100, 150, 200, 300, 400, 600 dpi	
File formats	TIFF, PDF, PDF/A, XPS	
Scan destination	Scan to e-mail/FTP server/network folder (SMB)/ USB drive	
Network Printer Functions		
Resolution	600 x 600 dpi, 9,600 (equivalent) x 600 dpi	
Interface	USB 2.0, Gigabit ethernet, Wireless 802.11	
Supported OS	Windows Server® 2008, Windows Server® 2008 R2, Windows Server® 2012, Windows Server® 2012 R2, Windows Server® 2016, Windows Vista®, Windows® 7, Windows® 8.1, Windows® 10, Mac OS 10.9,10.10,10.11,10.12,10.13,10.14,10.15	
Network protocols	TCP/IP (IPv4), IPX/SPX (NetWare)	
Printing protocols	LPR, Raw TCP (port 9100), POP3 (e-mail printing), HTTP, FTP for downloading print files, IPP	
PDL	PCL 6 emulation, Adobe PostScript 3	
Available fonts	80 fonts for PCL ,139 fonts for Adobe postscript 3	
Finisher		
Paper size	Non offset: A3 WIDE, Offset /staple: A3	
Paper capacity Minimum	Non offset /offset :500 sheets (A4 or small) ,250 sheets (B4 or larger)	
	staple: 30 sets or 500 sheets (A4 or small)	
	staple less staple :30 sets	
Stapling capacity Minimum	staple: 50 sheets (A4)	
Warranty	Minimum One Year	

SECTION IV: MINIMUM SPECIFICATIONS REQUIREMENT

TYPE 1: Light Duty 350VA Universal UPS

Specification	Minimum Requirements	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input		

Input voltage range	160VAC - 280VAC	
AC Input Circuit Breaker Minimum	3A	
AC Input Fuse Minimum	3A	
Input Connection	IEC-C14 or connections suitable for use in Kenya	
Output:		
Power Capacity	350VA/210W	
Output Voltage	230VAC $\pm$ 10%	
Output frequency (Sync mode)	50Hz or 60Hz $\pm$ 0.1Hz	
Topology and output waveform	Pure Sine Wave	
Output Connections	2 x IEC-C13 or connections suitable for use in Kenya	
Automatic Voltage Regulation	Yes	
Transfer time	2-6ms	
Efficiency	> 85%	
Control Panel	LED indicators for status, fault, and overload	
Audible Alarms	Audible alarm for battery low, overload, and fault	
Noise:	< 40dB at 1 meter	
Battery:		
Battery Type	Sealed Lead Acid (SLA)	
Typical Recharge time	6 hours to 90% capacity	
120W Runtime(minutes) Minimum	10 minutes	
180W Runtime(minutes) Minimum	5 minutes	
Cold Start	Yes	
System:		
Auto-restart function	Yes	
Software compatibility	Windows, Mac OS, and Linux	
Surge protection	Yes	
Display	LCD display showing input/output voltage, battery level, and load level	
Other:		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card	
Warranty	Minimum 2 years	
Standards	IEC 62040-1, IEC 62040-2, IEC 60950-1	

Regulatory Conformance	CE, RoHS, REACH	
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TYPE 2: Light Duty 425VA Universal UPS

Specification	Minimum Requirements	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input:		
Input voltage range	160VAC ~ 280VAC	
AC Input Circuit Breaker Minimum	3A	
AC Input Fuse Minimum	3A	
Input Connection	IEC-C14 or connections suitable for use in Kenya	
Output:		
Power Capacity	425VA/255W	
Output Voltage	230VAC $\pm$ 10%	
Output frequency (Sync mode)	50Hz or 60Hz $\pm$ 0.1Hz	
Topology and output waveform	Pure Sine Wave	
Output Connections	2 x IEC-C13 or connections suitable for use in Kenya	
Automatic Voltage Regulation	Yes	
Transfer time	2-6ms	
Efficiency	> 85%	
Control Panel	LED indicators for status, fault, and overload	
Audible Alarms	Audible alarm for battery low, overload, and fault	
Noise:	< 40dB at 1 meter	
Battery:		
Battery Type	Sealed Lead Acid (SLA)	
Typical Recharge time	6 hours to 90% capacity	
120W Runtime(minutes) Minimum	12 minutes	
180W Runtime(minutes) Minimum	6 minutes	
Cold Start	Yes	
System:		
Auto-restart function	Yes	

Software compatibility	Windows, Mac OS, and Linux	
Surge protection	Yes	
Display	LCD display showing input/output voltage, battery level, and load level	
Other:		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card	
Warranty	Minimum 2 years	
Standards	IEC 62040-1, IEC 62040-2, IEC 60950-1	
Regulatory Conformance	CE, RoHS, REACH	

TYPE 3: Light Duty 500VA Universal UPS

Specification	Minimum Requirements	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input:		
Input voltage range	160VAC - 280VAC	
AC Input Circuit Breaker Minimum	3A	
AC Input Fuse Minimum	3A	
Input Connection	IEC-C14 or connections suitable for use in Kenya	
Output:		
Power Capacity	500VA/300W	
Output Voltage	230VAC $\pm$ 10%	
Output frequency (Sync mode)	50Hz or 60Hz $\pm$ 0.1Hz	
Topology and output waveform	Pure Sine Wave	
Output Connections	2 x IEC-C13 or connections suitable for use in Kenya	
Automatic Voltage Regulation	Yes	
Transfer time	2-6ms	
Efficiency	> 85%	

Control Panel and Audible Alarms:	LED indicators for status, fault, and overload	
Audible Alarms	Audible alarm for battery low, overload, and fault	
Noise:	< 40dB at 1 meter	
Battery:		
Battery Type	Sealed Lead Acid (SLA)	
Typical Recharge time	6 hours to 90% capacity	
120W Runtime(minutes) Minimum	10 minutes	
180W Runtime(minutes) Minimum	5 minutes	
Cold Start	Yes	
System:		
Auto-restart function	Yes	
Software compatibility	Windows, Mac OS, and Linux	
Surge protection	Yes	
Display	LCD display showing input/output voltage, battery level, and load level	
Other:		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card	
Warranty	Minimum 2 years	
Standards	IEC 62040-1, IEC 62040-2, IEC 60950-1	
Regulatory Conformance	CE, RoHS, REACH	

Type 4: Light Duty 550VA Universal UPS

Specification	Minimum Requirements	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input		
Input voltage range	160VAC ~ 280VAC	

AC Input Circuit Breaker Minimum	3A	
AC Input Fuse Minimum	3A	
Input Connection	IEC-C14 or connections suitable for use in Kenya	
Output		
Power Capacity	550VA/330W	
Output Voltage	230VAC $\pm$ 10%	
Output frequency (Sync mode)	50Hz or 60Hz $\pm$ 0.1Hz	
Topology and output waveform	Offline UPS (PWM sine wave)	
Output Connections	2 x IEC-C13 or connections suitable for use in Kenya	
Automatic Voltage Regulation	Yes	
Transfer time	2-6ms	
Efficiency	> 85%	
Control Panel and Audible Alarms:	LED indicators for status, fault, and overload	
Audible Alarms	Audible alarm for battery low, overload, and fault	
Noise	< 40dB at 1 meter	
Battery		
Battery Type	Sealed Lead Acid (SLA)	
Typical Recharge time	6 hours to 90% capacity	
120W Runtime(minutes) Minimum	15 minutes	
180W Runtime(minutes) Minimum	7 minutes	
Cold Start	Yes	
System		
SNMP/Network Compatibility	No	
Auto-restart function	Yes	
Software compatibility	Windows, Mac OS, and Linux	
Surge protection	Yes	
Display	LCD display showing input/output voltage, battery level, and load level	
Other		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card	
Warranty	Minimum 2 years	

Standards	IEC 62040-1, IEC 62040-2, IEC 60950-1	
Regulatory Conformance	CE, RoHS, REACH	

Type 5: Light Duty 1000VA Universal UPS

Specification	Minimum Requirements	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input:		
Input voltage range	160VAC ~ 280VAC	
AC Input Circuit Breaker Minimum	5A	
AC Input Fuse Minimum	5A	
Input Connection	IEC-C14 or connections suitable for use in Kenya	
Output:		
Power Capacity	1000VA / 600W	
Output Voltage	230VAC $\pm$ 10%	
Output frequency (Sync mode)	50Hz or 60Hz $\pm$ 0.1Hz	
Topology and output waveform	Offline UPS (PWM sine wave)	
Output Connections	3 x IEC-C13 or connections suitable for use in Kenya	
Automatic Voltage Regulation	Yes	
Transfer time	2-6ms	
Efficiency	> 85%	
Control Panel	LED indicators for status, fault, and overload	
Audible Alarms	Audible alarm for battery low, overload, fault	
Noise	< 40dB at 1 meter	
Battery Type	Sealed Lead Acid (SLA)	
Typical Recharge time	6 hours to 90% capacity	
120W Runtime(minutes) Minimum	15 minutes	
180W Runtime(minutes) Minimum	7 minutes	

Cold Start	Yes	
SNMP/Network Compatibility	No	
Auto-restart function	Yes	
Software compatibility	Windows, Mac OS, and Linux	
Surge protection	Yes	
Display	LCD display showing input/output voltage, battery level, and load level	
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card	
Warranty	Minimum 2 Years	
Standards	IEC 62040-1, IEC 62040-2, IEC 60950-1	
Regulatory Conformance	CE, RoHS, REACH	

Type 6: Line Interactive UPS 750VA

Specification	Minimum Requirements	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input		
Input voltage range	160V - 280V	
Input frequency range	50Hz / 60Hz	
Input connection	IEC C14 or connections suitable for use in Kenya	
Output		
Power capacity	750VA / 450W	
Nominal output voltage	230VAC	
Output frequency range (battery mode)	50Hz / 60Hz +/- 1Hz	
Topology and output waveform	Line interactive; sine wave	
Transfer time	2-6ms	
Output connections	3 x IEC C13 or connections suitable for use in Kenya	
Battery type	Sealed Lead-Acid (maintenance-free)	
Typical recharge time	6 hours to 90% capacity	
Full load runtime	5-10 minutes	
Half load runtime	15-20 minutes	
Battery connector	Internal	
RS232 port	Yes	

USB port	Yes	
LCD display	Yes	
SNMP/network compatibility	Optional SNMP card for remote management	
Auto-restart function	Yes	
Software compatibility	Compatible with Windows, Linux and Mac OS	
LED indicators	AC mode, battery mode, fault, overload	
Audible alarms	Battery low, overload, fault	
Efficiency rating	>85%	
Surge protection	600 Joules Minimum	
Automatic voltage regulation	Yes	
Cold start	Yes	
Noise level	<40dB at 1M	
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card	
Warranty	2 years Minimum	
Standards and regulatory conformance	IEC 62040-1-1:2017, CE, RoHS, REACH, ,	

Type 7: Line Interactive UPS 800VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input:			
Input voltage range	160-280 VAC		
Input frequency range	50Hz / 60Hz		
Input connection	IEC C14 or connections suitable for use in Kenya		
Output:			
Power capacity	800 VA / 480 W		
Nominal output voltage	230 VAC		
Output frequency range (battery mode)	50Hz / 60Hz +/- 1Hz		
Topology and output waveform	Line Interactive, pure sine wave		

Transfer time	≤ 6 ms		
Output connections	(4) IEC 320 C13		
Battery:			
Battery type	Sealed Lead-Acid, maintenance-free		
Typical recharge time	8 hours to 90% capacity		
Full load runtime	5 minutes		
Half load runtime	15 minutes		
Battery connector	User replaceable, hot-swappable		
Communication and Management:			
RS232 port	Yes		
USB port	Yes		
LCD display	Yes		
SNMP/network compatibility	Optional SNMP card for remote management		
Auto-restart function	Yes		
Software compatibility	Compatible with Windows, Linux and Mac OS		
Control Panel and Audible Alarms:			
LED indicators	AC mode, battery mode, fault, overload		
Audible alarms	Battery low, overload, fault		
Efficiency:			
Efficiency rating	> 85%		
Other:			
Surge protection	Minimum 600 Joules		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	< 45 dB		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable		

	for use in Kenya), warranty card		
Warranty	2 years		
Standards and regulatory conformance.	IEC 62040-1, IEC 62040-2, IEC 60950-1, IEC 61000-3-2, IEC 61000-3-3, CE, RoHS, REACH,		

Type 8: Line Interactive UPS 850VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input:			
Input voltage range	140V ~ 300V		
Input frequency range	50/60 Hz		
Input connection	IEC C14 or connections suitable for use in Kenya		
Output:			
Power capacity	850VA / 480W		
Nominal output voltage	220/230/240V		
Output frequency range (battery mode)	50/60 Hz +/- 1Hz		
Topology and output waveform	Line interactive, sine wave		
Transfer time	2-6ms		
Output connections	3 x IEC output sockets		
Battery:			
Battery type	Sealed lead-acid		
Typical recharge time	6 hours to 90%		
Full load runtime	6-8 minutes		
Half load runtime	10-15 minutes		
Battery connector	1 x internal battery		
Communication and Management:			
RS232 port	Yes		

USB port	Yes		
LCD display	Yes		
SNMP/network compatibility	Optional SNMP card for remote management		
Auto-restart function	Yes		
Software compatibility	Compatible with Windows, Linux and Mac OS		
Control Panel and Audible Alarms:			
LED indicators	AC mode, battery mode, fault, overload		
Audible alarms	Battery low, overload, fault		
Efficiency rating	≥ 85%		
Other:			
Surge protection	Minimum 600 Joules		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	≤ 40dB		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Warranty	Minimum 2yrs		
Standards and regulatory conformance.	IEC 62040-1, IEC 62040-2, IEC 60950-1, IEC 61000-3-2, IEC 61000-3-3, CE, RoHS, REACH		

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input:			
Input voltage range	160-280V		
Input frequency range	50Hz/60Hz $\pm$ 1%		
Input connection	IEC or connections suitable for use in Kenya		
Output:			
Power capacity	1500VA / 900W		
Nominal output voltage	230VAC		
Output frequency range	50Hz/60Hz $\pm$ 1Hz (battery mode)		
Topology and output waveform	Line Interactive, sine wave		
Transfer time	<10ms		
Output connections	(4) Universal sockets, IEC or connections suitable for use in Kenya		
Battery:			
Battery type	Sealed Lead-Acid		
Typical recharge time	8 hours		
Full load runtime	5 minutes		
Half load runtime	15 minutes		
Battery connector	Internal		
Communication and Management:			
RS232 port	Yes		
USB port	Yes		
LCD display	Yes		
SNMP/network compatibility	Optional		
Auto-restart function	Yes		
Software compatibility	Windows, Linux, Mac		
LED indicators	Status, fault, overload		
Audible alarms	Battery low, overload, fault		
Efficiency rating	>85%		

Other:			
Surge protection	Minimum 600 Joules		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	<40dB		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Warranty	Minimum 2 years		
Standards and regulatory conformance.	CE, RoHS, ISO9001, IEC 62040-1, IEC 62040-2, IEC 60950-1, IEC 61000-3-2, IEC 61000-3-3, REACH		

Type 10: Line Interactive UPS 3000VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input:			
Input voltage range	160-280 VAC		
Input frequency range	50Hz/60Hz $\pm$ 1Hz (battery mode)		
Input connection	IEC or connections suitable for use in Kenya		
Output:			
Power capacity	3000VA/2400W		
Nominal output voltage	230VAC		
Output frequency range (battery mode)	50/60 Hz ($\pm$ 1Hz)		
Topology and output waveform	Line Interactive, Sine Wave		
Transfer time	2-6 ms (Typical)		
Output connections	IEC or connections suitable for use in Kenya		
Battery:			
Battery type	Sealed lead-acid, maintenance-free		
Typical recharge time	8 hours to 90% after complete discharge		

Full load runtime	5 minutes		
Half load runtime	15 minutes		
Battery connector	Internal		
Communication and Management:			
RS232 port	Yes		
USB port	Yes		
LCD display	Yes		
SNMP/network compatibility	Optional		
Auto-restart function	Yes		
Software compatibility	Yes		
System:			
LED indicators	AC mode, Battery mode, Fault, Overload, Battery low		
Audible alarms	Battery mode, Battery low, Overload, Fault		
Efficiency rating	Up to 92%		
Other:			
Surge protection	600 Joules Minimum		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	<40dB		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty		
Warranty	2 years Minimum		
Standards and regulatory conformance	CE, RoHS, IEC 62040-1-1, IEC 60950-1		

Type 11: Online Double Conversion UPS 1500VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input Voltage	230V AC		

Input Frequency	50Hz		
Input Voltage Range	± 25%		
Input Connection	IEC C14 or C20 or connections suitable for use in Kenya		
Output			
Power Capacity	1500VA (1050W)		
Nominal Output Voltage	230V AC		
Output Frequency Range (Battery)	50Hz ± 0.5Hz		
Output Connections	IEC C13 or C19 or connections suitable for use in Kenya		
Battery			
Battery Type	Sealed lead-acid		
Typical Recharge Time	4-6 hours		
Runtime Estimates at Full Load	5-10 minutes		
Runtime Estimates at Half Load	15-20 minutes		
Battery Connector	Internal		
System			
Topology and Output Waveform	Online Double Conversion (Pure Sine Wave)		
Efficiency Rating	Above 90%		
Surge Protection and Filtering	Minimum 600 Joules		
Automatic Voltage Regulation	Yes		
Cold Start	Yes		
Noise Level	Less than 50 dB		
Others			
Packaging	Tower form factor		
Remote Management Capability	Optional (SNMP/network compatibility)		
Control Panel and Audible Alarms	LED indicators, audible alarms		
Management Software	Windows, Linux, Mac		
Warranty	Minimum 2 Years		
Standards and Regulatory Conformance	CE, RoHS, IEC 62040-1-1, IEC 60950-1		

Emergency Power Off (EPO)	Optional		
Flexibility	Optional features for customization		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		

Type 12: Online Double Conversion UPS 2000VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input voltage	220/230/240VAC		
Input frequency	50Hz/60Hz +/- 1Hz		
Input Voltage Range	230VAC		
Input Connection	IEC or connections suitable for use in Kenya		
Output			
Power capacity	2000VA/1600W		
Nominal output voltage	220/230/240VAC		
Output frequency range (battery mode)	50Hz / 60Hz +/- 0.1Hz		
Topology and output waveform	Double Conversion Online, Pure Sine Wave		
Transfer time	0ms		
Output connections	IEC or connections suitable for use in Kenya		
Battery			
Battery type	Sealed Lead Acid		
Typical recharge time	4-6 hours		
Runtime Estimates at Full load (min)	5-10 minutes		
Runtime Estimates at half load (min)	15-20 minutes		
Full load runtime	5-10 minutes		
Half load runtime	15-20 minutes		
Battery connector	Internal		

Communication and Management			
DB-9 RS232	Yes		
Intelligent Slot	Yes (Optional)		
LCD display	Yes		
SNMP/network compatibility	Yes (Optional)		
Auto-restart function	Yes		
Software compatibility	Windows, Linux, Mac		
Control Panel and Audible Alarms			
LED indicators	AC mode, Battery mode, Fault, Overload, Battery low		
Audible alarms	Battery mode, Battery low, Overload, Fault		
Efficiency rating	>90%		
Other			
Surge protection and filtering	Yes		
Surge Energy Rating (Joules)	>500 Joules		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	<45dB at 1 meter		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Warranty	2 years Minimum		
Standards and regulatory conformance	IEC 62040-1, IEC 62040-2, IEC 62040-3, IEC 62040-4, IEC 60950-1		
Emergency power off (EPO)	Yes (Optional)		

Type 13: Online Double Conversion UPS 2200VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE

			(Highlighted in the Brochure)
Input			
Nominal Input voltage	220-240V		
Input frequency	50/60 Hz +/- 1Hz		
Input Voltage Range	110-300V		
Input Connection	IEC or connections suitable for use in Kenya		
Output			
Power capacity	2200VA/1980W		
Nominal output voltage	220-240V		
Output frequency range (battery mode)	50/60 Hz		
Topology and output waveform	Double Conversion, Sine wave		
Transfer time	0 ms		
Output connections	IEC or connections suitable for use in Kenya		
Battery			
	Sealed Maintenance Free Lead Acid Battery		
IEC or connections suitable for use in Kenya	4-6 hours		
Full load runtime	5-7 minutes		
Half load runtime	12-15 Minutes		
Battery Connector	Internal		
Communication and Management			
DB-9 RS232	Yes		
Intelligent Slot	Yes (Optional)		
LCD display	Yes		
SNMP/network compatibility	Yes (Optional)		
Auto-restart function	Yes		
Software compatibility	Windows, Linux, Mac		
Control Panel and Audible Alarms			

LED indicators	AC mode, Battery mode, Fault, Overload, Battery low		
Audible alarms	Battery mode, Battery low, Overload, Fault		
Efficiency rating	>90%		
Other			
Surge protection and filtering	Yes		
Surge Energy Rating (Joules)	<600J		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	<50dB		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Warranty	2 years Minimum		
Standards and regulatory conformance	CE, RoHS, ISO9001:2015		
Emergency power off (EPO)	Yes		

Type 14: Online Double Conversion UPS 3000VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input voltage	220-240 VAC		
Input frequency	50/60 Hz		
Input Voltage Range	+/- 25%		
Input Connection	IEC or connections suitable for use in Kenya		
Output			
Power capacity	3000 VA / 2400 W		
Nominal output voltage	220-240 VAC		
Output frequency range (battery mode)	50/60 Hz +/- 0.2 Hz		
Topology and output waveform	Online double conversion, pure sine wave		

Transfer time	0 ms		
Output connections	IEC or connections suitable for use in Kenya		
Battery			
Battery type	Sealed, maintenance-free lead-acid battery		
Typical recharge time	3 hours		
Runtime Estimates at Full load (min)	6-8 minutes		
Runtime Estimates at half load (min)	15-20 minutes		
Full load runtime	Up to 8 minutes		
Half load runtime	Up to 20 minutes		
Battery connector	Either Internal or External		
Communication and Management			
DB-9 RS232	Yes		
Intelligent Slot	Yes(Optional))		
LCD display	Yes		
SNMP/network compatibility	Optional		
Auto-restart function	Yes		
Software compatibility	Windows, Linux, Unix and Mac		
Control Panel and Audible Alarms			
LED indicators	Status, load level, battery level		
Audible alarms	Battery mode, low battery, overload, fault		
Efficiency rating	Up to 92%		
Other			
Surge protection and filtering	Yes		
Surge Energy Rating (Joules)	<500 Joules		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	Less than 50 dBA at 1 meter		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power		

	cables (suitable for use in Kenya), warranty card		
Warranty	2 years Minimum		
Standards and regulatory conformance	IEC/EN 62040-1-1, IEC/EN 60950-1, IEC/EN 62040-2		
Emergency power off (EPO)	Yes		

Type 15: Online Double Conversion UPS 6000VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input voltage	220V		
Input frequency	50/60Hz		
Input Voltage Range	220-240VAC		
Input Connection	IEC or connections suitable for use in Kenya		
Output			
Power capacity	6000VA/5400W		
Nominal output voltage	220V		
Output frequency range (battery mode)	50/60Hz $\pm$ 0.1Hz		
Topology and output waveform	Double Conversion Online, Pure Sine Wave		
Transfer time	0ms		
Output connections	IEC or connections suitable for use in Kenya		
Battery			
Battery type	Sealed, maintenance-free lead-acid battery		
Typical recharge time	6 hours to 90% capacity		
Runtime Estimates at Full load (min)	7 minutes		
Runtime Estimates at half load (min)	19 minutes		
Full load runtime	7 minutes		

Half load runtime	19 minutes		
Battery connector	Internal or External		
Communication and Management			
DB-9 RS232	Yes		
Intelligent Slot	Optional		
LCD display	Yes		
SNMP/network compatibility	Optional		
Auto-restart function	Yes		
Software compatibility	Windows, Linux or Mac		
Control Panel and Audible Alarms			
LED indicators	Power on, wiring fault, overload, battery level		
Audible alarms	On battery, low battery, overload, fault		
Efficiency rating	Up to 94%		
Other			
Surge protection and filtering	Yes		
Surge Energy Rating (Joules)	600 Joules		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	Less than 60dB		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Warranty	2 years minimum		
Standards and regulatory conformance	CE, IEC/EN 62040-1-1, IEC/EN 60950-1, IEC/EN 62040-2		
Emergency power off (EPO)	Yes		

Type 16: Online Double Conversion UPS 10000VA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)

Input			
Nominal Input voltage	220V AC		
Input frequency	50Hz (auto-sensing)		
Input Voltage Range	220-240VAC		
Input Connection	IEC or connections suitable for use in Kenya		
Output			
Power capacity	10000VA / 8000W		
Nominal output voltage	220V AC		
Output frequency range (battery mode)	50Hz / 60Hz (± 0.2 Hz)		
Topology and output waveform	Double conversion		
Transfer time	0ms (AC mode to battery)		
Output connections	IEC or connections suitable for use in Kenya		
Battery			
Battery type	Sealed, maintenance-free		
Typical recharge time	9 hours (to 90%)		
Runtime Estimates at Full load (min)	7 minutes		
Runtime Estimates at half load (min)	20 minutes		
Full load runtime	7 minutes		
Half load runtime	20 minutes		
Battery connector	Internal or External		
Communication and Management			
DB-9 RS232	Yes		
Intelligent Slot	Yes (optional)		
LCD display	Yes		
SNMP/network compatibility	Yes (Optional)		
Auto-restart function	Yes		
Software compatibility	Windows, Linux, Mac OS		
Control Panel and Audible Alarms			
LED indicators	Power on, wiring fault, overload, battery level		
Audible alarms	On battery, low battery, overload, fault		
Efficiency rating	90%		

Other			
Surge protection and filtering	Yes		
Surge Energy Rating (Joules)	6200J		
Automatic voltage regulation	Yes		
Cold start	Yes		
Noise level	Less than 55dB		
Packaging			
Warranty	1 year		
Standards and regulatory conformance	CE, RoHS, KEMA		
Emergency power off (EPO)	Yes		

Type 17: Modular UPS 50kVA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input Voltage	380V/400V/415V (3-phase)		
Input Frequency	50/60 Hz		
Input Voltage Range	±25% (adjustable)		
Input Connection	Hardwired		
Output			
Power Capacity	10kVA to 500kVA (scalable)		
Nominal Output Voltage	380V/400V/415V (3-phase)		
Output Frequency Range (Battery Mode)	50/60 Hz (±0.1%)		
Topology and Output Waveform	Double Conversion Online, Pure Sine Wave		
Transfer Time	0ms		
Output Connections	Hardwired		
Battery			
Battery Type	Sealed Lead Acid (VRLA), Lithium-ion (optional)		

Typical Recharge Time	3-6 hours (depending on battery size)		
Runtime Estimates at Full Load	5-15 minutes (depending on battery size)		
Runtime Estimates at Half Load	15-30 minutes (depending on battery size)		
Full Load Runtime	5-15 minutes (depending on battery size)		
Half Load Runtime	15-30 minutes (depending on battery size)		
Battery Connector	Terminal Block		
System			
Efficiency Rating	≥95%		
Surge Protection and Filtering	IEEE C62.41 Category C3		
Automatic Voltage Regulation	±1%		
Cold Start	Yes		
Parallel Operation	Up to 8 units		
Redundancy	N+1 or 2N		
Scalability	Vertical and horizontal expansion		
Hot Swappability	Yes		
Fault Tolerance	Yes		
Maintenance Bypass	Built-in		
Battery Management	Intelligent battery monitoring and management system		
Others			
Modularity	Modular design with hot-swappable modules		
Support for Multiple Rack Depths	Yes		
Remote Management Capability	SNMP, RS232, USB, and optional Ethernet		
Control Panel and Audible Alarms	LCD display with audible alarms		
Management Software	UPS management software included		

Warranty	2 Years Minimum		
Standards and Regulatory Conformance	CE, RoHS, ISO9001, ISO14001, IEC62040		
Emergency Power Off (EPO)	Yes		
Flexibility	Various installation options, including tower and rack		
Packaging	Industrial-grade packaging for transport and storage		
Adjustable Mounting Rails	Yes		
Noise Level	<60dB at 1 meter		

Type 18: Online Rack Mount UPS 2KVA ~ Low Power Online Rack Mount UPS

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input Voltage	230V AC		
Input Frequency	50/60 Hz		
Input Voltage Range	220-240VAC		
Input Connection	C14, C20, or Hardwired		
Output			
Power Capacity	At least 2kVA		
Nominal Output Voltage	230V AC		
Output Frequency Range	50/60 Hz (battery mode)		
Topology and Output Waveform	Double conversion on-line		
Transfer Time	0ms		
Output Connections	IEC C13 and/or C19		
Battery			
Battery Type	Sealed lead-acid		
Typical Recharge Time	4 hours		
Runtime Estimates at Full Load	At least 5 minutes		

Runtime Estimates at Half Load	At least 15 minutes		
Full Load Runtime	At least 5 minutes		
Half Load Runtime	At least 15 minutes		
Battery Connector	Detachable		
System			
Efficiency Rating	At least 90%		
Surge Protection and Filtering	Yes		
Surge Energy Rating	At least 600 Joules		
Automatic Voltage Regulation	Yes		
Cold Start	Yes		
Noise Level	Less than 50 dB at 1 meter		
Others			
Packaging	Rack mountable		
Adjustable Mounting Rails	Yes		
Support for Multiple Rack Depths	Yes		
Remote Management Capability	SNMP/network compatibility		
Control Panel and Audible Alarms	LED indicators, audible alarms		
Management Software	Compatible with manufacturer's software and Windows/Mac/Linux OS		
Warranty	At least 2year		
Standards and Regulatory Conformance	CE, RoHS, ISO9001, ISO14001, IEC62040		
Emergency Power Off (EPO)	Yes		
Modularity	Yes		
Redundancy	N+1 or better		
Scalability	Yes		
Hot Swappability	Yes		
Parallel Operation	Yes		
Fault Tolerance	Yes		
Maintenance Bypass	Yes		
Battery Management	Yes		

Type 19: Online Rack Mount UPS 6KVA ~ Medium Power Online Rack Mount UPS

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input Voltage	230V AC		
Input Frequency	50/60 Hz		
Input Voltage Range	220 – 240 VAC		
Input Connection	C14, C20, or Hardwired		
Output			
Power Capacity	At least 6kVA		
Nominal Output Voltage	230V AC		
Output Frequency Range	50/60 Hz (battery mode)		
Topology and Output Waveform	Double conversion on-line		
Transfer Time	0ms		
Output Connections	IEC C13 and/or C19		
Battery			
Battery Type	Sealed lead-acid		
Typical Recharge Time	4 hours		
Runtime Estimates at Full Load	At least 5 minutes		
Runtime Estimates at Half Load	At least 15 minutes		
Full Load Runtime	At least 5 minutes		
Half Load Runtime	At least 15 minutes		
Battery Connector	Detachable		
System			
Efficiency Rating	At least 90%		
Surge Protection and Filtering	Yes		

Surge Energy Rating	At least 550 Joules		
Automatic Voltage Regulation	Yes		
Cold Start	Yes		
Noise Level	Less than 50 dB		
Others			
Packaging	Rack mountable		
Adjustable Mounting Rails	Yes		
Support for Multiple Rack Depths	Yes		
Remote Management Capability	SNMP/network compatibility		
Control Panel and Audible Alarms	LED indicators, audible alarms		
Management Software	Compatible with manufacturer's software and Windows, Linux or Mac OS		
Warranty	At least 2 year		
Standards and Regulatory Conformance	CE, RoHS, ISO9001, ISO14001, IEC62040		
Emergency Power Off (EPO)	Yes		
Modularity	Yes		
Redundancy	N+1 or better		
Scalability	Yes		
Hot Swappability	Yes		
Flexibility	Yes		
Parallel Operation	Yes		
Fault Tolerance	Yes		
Maintenance Bypass	Yes		
Battery Management	Yes		

Type 20: Online Rack Mount UPS 10KVA ~ High Power Online Rack Mount UPS

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input Voltage	230V AC		
Input Frequency	50/60 Hz		
Input Voltage Range	220-240VAC		
Input Connection	C14, C20, or Hardwired		
Output			
Power Capacity	At least 8kVA		
Nominal Output Voltage	230V AC		
Output Frequency Range (Battery Mode)	50/60 Hz		
Topology and Output Waveform	Double conversion on-line		
Transfer Time	0ms		
Output Connections	IEC C13 and/or C19		
Battery			
Battery Type	Sealed lead-acid		
Typical Recharge Time	4 hours		
Runtime Estimates at Full Load	At least 5 minutes		
Runtime Estimates at Half Load	At least 15 minutes		
Full Load Runtime	At least 5 minutes		
Half Load Runtime	At least 15 minutes		
Battery Connector	Detachable		
System			
Efficiency Rating	At least 90%		
Surge Protection and Filtering	Yes		
Surge Energy Rating	At least 550 Joules		
Automatic Voltage Regulation	Yes		

Cold Start	Yes		
Noise Level	Less than 50 dB		
Others			
Packaging	Rack mountable		
Adjustable Mounting Rails	Yes		
Support for Multiple Rack Depths	Yes		
Remote Management Capability	SNMP/network compatibility		
Control Panel and Audible Alarms	LED indicators, audible alarms		
Management Software	Compatible with manufacturer's software and Linux, Windows or Mac OS		
Warranty	At least 2 years		
Standards and Regulatory Conformance	CE, RoHS, ISO9001, ISO14001, IEC62040		
Emergency Power Off (EPO)	Yes		
Modularity	Yes		
Redundancy	N+1 or better		
Scalability	Yes		
Hot Swappability	Yes		
Flexibility	Yes		
Parallel Operation	Yes		
Fault Tolerance	Yes		
Maintenance Bypass	Yes		
Battery Management	Yes		

Type 21: Light Duty Tower UPS: Light Duty 6500VA Universal UPS

Input	Minimum Specifications	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Nominal Input Voltage	230V		

Input Frequency	50/60 Hz		
Input Voltage Range	± 25%		
Input Connection	IEC320 C14		
Output			
Power Capacity	6500VA / 3900W		
Nominal Output Voltage	230V		
Output Frequency Range (Battery Mode)	50/60 Hz ± 1 Hz		
Topology and Output Waveform	True online double conversion, sine wave		
Transfer Time	0 ms		
Output Connections	(4) IEC320 C13		
Battery			
Battery Type	Sealed lead-acid, maintenance-free		
Typical Recharge Time	6 hours to 90% capacity after full load discharge		
Runtime Estimates at Full Load	7 minutes		
Runtime Estimates at Half Load	20 minutes		
Full Load Runtime	7 minutes		
Half Load Runtime	20 minutes		
Battery Connector	2 x IEC320 C13		
System			
Efficiency Rating	≥ 88% @ full load		
Surge Protection and Filtering	IEEE/ANSI C62.41 Category A & B standards		
Surge Energy Rating	320 Joules		
Automatic Voltage Regulation	± 10%		
Battery Management	Automatic battery test, low battery warning, automatic shut off		
Others			
Remote Management Capability	Optional		
Control Panel and Audible Alarms	LED indicators, audible alarm		

Management Software	Optional		
Warranty	2 years Minimum		
Standards and Regulatory Conformance	CE, RoHS, ISO9001		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Noise Level	< 50 dB		

Type 22: Mid-Range Tower UPS: Mid-Range Tower UPS 20kVA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input Voltage	230V AC		
Input Frequency	50Hz		
Input Voltage Range	220-240VAC		
Input Connection	Hardwired		
Output			
Power Capacity	20kVA / 18kW		
Nominal Output Voltage	230V AC		
Output Frequency Range (Battery Mode)	50Hz		
Topology and Output Waveform	Online double-conversion / Pure sine wave		
Transfer Time	0ms		
Output Connections	Hardwired		
Battery			
Battery Type	Sealed lead-acid (VRLA)		
Typical Recharge Time	5 hours		
Runtime Estimates at Full Load	7 minutes		
Runtime Estimates at Half Load	15 minutes		

Full Load Runtime	7 minutes		
Half Load Runtime	15 minutes		
Battery Connector	Hardwired		
System			
Efficiency Rating	> 90%		
Surge Protection and Filtering	Yes		
Surge Energy Rating	> 480 Joules		
Automatic Voltage Regulation	Yes		
Cold Start	Yes		
Parallel Operation	Yes, up to 4 units		
Redundancy	N+1 or N+N		
Scalability	Yes, up to 4 units		
Hot Swappability	Yes		
Fault Tolerance	Yes		
Maintenance Bypass	Yes		
Battery Management	Automatic self-testing and diagnostic capabilities		
Others			
Modularity	Yes		
Remote Management Capability	Yes, SNMP, USB, RS-232		
Control Panel and Audible Alarms	Yes, LCD display and audible alarms		
Management Software	Yes, for monitoring and management		
Warranty	Minimum 2 years		
Standards and Regulatory Conformance	Compliant with Kenyan and international standards and CE, RoHS, ISO9001		
Emergency Power Off (EPO)	Yes		
Flexibility	Yes, with adjustable output voltage and frequency		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Noise Level	< 55 dBA		

Type 23: High Capacity Tower UPS: High Capacity Tower UPS 30kVA

Specification	Minimum Requirements	COMPLIANCE (Yes/No)	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Input			
Nominal Input Voltage	380V/220V		
Input Frequency	50/60 Hz		
Input Voltage Range	±25%		
Input Connection	Hardwired		
Output			
Power Capacity	30kVA		
Nominal Output Voltage	380V/220V		
Output Frequency Range (Battery Mode)	50/60 Hz		
Topology and Output Waveform	True Online, Sine Wave		
Transfer Time	0 ms		
Output Connections	Hardwired or Terminal Block		
Battery			
Battery Type	Sealed, Maintenance-free Lead Acid Battery		
Typical Recharge Time	4 hours to 90% capacity		
Runtime Estimates at Full Load	5-10 minutes		
Runtime Estimates at Half Load	15-20 minutes		
Full Load Runtime	5-10 minutes		
Half Load Runtime	15-20 minutes		
Battery Connector	Hardwired		
System			
Efficiency Rating	≥90%		
Surge Protection and Filtering	AC input surge protection, EMI/RFI filtering		

Surge Energy Rating	≥480 Joules		
Automatic Voltage Regulation	±1%		
Cold Start	Yes		
Parallel Operation	Yes, up to 4 units in parallel		
Redundancy	Yes, with parallel operation		
Scalability	Yes, with parallel operation		
Hot Swappability	Yes		
Fault Tolerance	Yes, with parallel operation		
Maintenance Bypass	Yes		
Battery Management	Yes, with automatic self-test, battery aging detection, and replacement reminder		
Others			
Modularity	Yes, with modular design		
Remote Management Capability	Yes, with SNMP and RS232		
Control Panel and Audible Alarms	Yes		
Management Software	Yes, with monitoring and management software		
Warranty	Minimum 2 years		
Standards and Regulatory Conformance	CE, RoHS, Kenya Bureau of Standards		
Emergency Power Off (EPO)	Yes		
Flexibility	Yes		
Packaging	UPS unit, user manual, USB cable, IEC C13 to BS1363 power cables (suitable for use in Kenya), warranty card		
Noise Level	≤55 dB(A)		

RECOMMENDED MINIMUM SPECIFICATIONS

LAPTOP COMPUTER ~ TYPE 1		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core™ i7, 12 MB L3 cache	
System Memory	16 GB DDR4 SDRAM (16 GB)	
Memory Slots	2 SODIMM	
Storage Subsystem	512 GB Intel® SSD	
Storage acceleration	32 GB	
Keyboard and Pointing Device	Full size Spill-resistant Backlit Keyboard; click pad with multi-touch gesture support	
Graphics	Intel® UHD Graphics	
Audio	Stereo audio system, microphone	
Integrated fingerprint reader	Yes	
WEBCAM	HD IR camera	
Wireless Technology	Intel Wi-Fi 6 and Bluetooth® 5 Combo	
Display	13.3" IPS WLED-backlit touch screen	
I/O interface ports	2 * USB 3.1 Type-C® with Thunderbolt™ support; 2 * USB 3.1 Gen 1; 1 * headphone/microphone combo; 1 * HDMI;	
Operating System	Genuine Windows® 11 Professional 64-bit, (with licensed CD or back up CD)	
Software	MS Office 2019 professional perpetual license or later with CDs; Latest Version of internet security antivirus licensed	

Accessories	Standard laptop bag (back pack); USB Optical Mouse; USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	53 Whr Li-ion; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER TYPE 2		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	12 th Generation Intel® Core™ i7, 18mb L3 cache	
System Memory	16 GB DDR4 SDRAM	
Storage Subsystem	1TB Intel® SSD	
Keyboard and Pointing Device	Full size Spill-resistant Backlit Keyboard; click pad with multi-touch gesture support; USB mouse USB Optical Mouse	
Audio	Stereo audio system	
	combo microphone in/audio out	
Communication interface	10/100 /1000 Mbps Gigabit Ethernet	
Integrated fingerprint reader	Yes	
WEBCAM	HD IR webcam	
Wireless Technology	Intel Wi-Fi 6 (2x2) and Bluetooth 5.0 Combo.	
Display	13.3' Anti-Glare FHD, Touchscreen	
I/O interface ports	2 x USB 3.1 port	
	2x USB 3.0 port	
	1x headphone/microphone combo	
	1x Finger Print Reader	
	1 x Card reader	
	1xRJ45	
	1x HDMI port	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office Professional 2019 later perpetual license or with CDs; Latest Version of internet security anti-virus license	
Accessories	Standard laptop bag (back pack), USB Optical Mouse	
Power subsystem	Long Life 95.6 WHR battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER TYPE 3		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	12 th Generation Intel® Core™ i7 (18 MB L3 cache)	
System Memory	16 GB DDR4 SDRAM	
Storage Subsystem	1 TB Intel® SSD	
Keyboard and Pointing Device	Full-size island-style backlit keyboard with numeric keypad	
Audio	Stereo audio system	
Communication interface	10/100 /1000 Mbps Gigabit Ethernet	
Integrated fingerprint reader	Yes	
WEBCAM	HD camera	
Wireless Technology	Intel® Wi-Fi® 6 (2x2) and Bluetooth® 5 Combo	
Display	17.3" FHD, IPS, WLED-backlit, multitouch-enabled	
I/O interface ports	1 * USB Type-C; 3 * USB Type-A; 1 * HDMI 2.0; 1 * RJ 45.	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (back pack); USB mouse	
Power subsystem	55 Whr Li-ion; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 4		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	Intel® Core™ i7 (12 MB L3 cache)	
Graphics	Intel® UHD Graphics	
System Memory	16 GB DDR4 SDRAM	
Storage Subsystem	1 TB Intel® SSD	
Storage acceleration	32 GB Memory	
Keyboard and Pointing Device	Full-size backlit keyboard with numeric keypad; Image pad with multi-touch gesture support	
Audio	Stereo audio system	
	combo microphone in/audio out	
Integrated fingerprint reader	Yes	
WEBCAM	HD IR camera	
Wireless Technology	Intel® Wi-Fi® 6 (2x2) and Bluetooth® 5 Combo	
Display	15.6" diagonal UHD, touch display	
I/O interface ports	2 * USB Type-C; 1 * USB Type-A; 1 * HDMI 2.0; 1 * RJ45 1 * headphone/microphone combo;	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CDs)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus	
Accessories	Standard laptop bag (back pack), USB Optical Mouse	
Power subsystem	72.9 Whr Li-ion Battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 5		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	Intel® Core™ i5	
Graphics	Intel® UHD Graphics	
System Memory	8 GB SDRAM (onboard)	
Storage Subsystem	256 GB SSD	
Keyboard and Pointing Device	Full-size island-style backlit keyboard; Image pad with multi-touch gesture support	
Audio	Stereo audio system	
	combo microphone in/audio out	
Integrated fingerprint reader	Yes	
WEBCAM	HD IR camera	
Wireless Technology	Intel® Wi-Fi® 6.0 and Bluetooth® 5.0 Combo	
Display	13.3" FHD IPS touch screen with Corning® Gorilla® Glass	
I/O interface ports	2 * Thunderbolt™ 3; 1 * USB Type-C™ 3; 1 * headphone/microphone combo	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (back pack), USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	54 Whr Li-ion; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 6

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	Intel® Core™ i5	
Graphics	Intel® UHD Graphics	
System Memory	8 GB SDRAM (onboard)	
Storage Subsystem	256 GB SSD	
Keyboard and Pointing Device	Full-size, spill resistant keyboard; Click pad with multi-touch gesture support	
Audio	HD audio, dual speakers	
Digital Active Pen	Yes	
Integrated fingerprint reader	Yes	
WEBCAM	Built-in HD webcam, dual microphone	
Wireless Technology	Intel® Wi-Fi® 6 (2x2) and Bluetooth® 5 Combo	
Display	11" LED touchscreen with camera, Corning® Gorilla® Glass	
I/O interface ports	2 * USB 3.1; 1 * USB Type-C®; 1 * RJ-45; 1 * headphone/microphone combo; 1 * HDMI 2.0; 1 * AC power	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Specialized laptop bag (back pack), USB optical mouse	
Power subsystem	48 Whr Long-life internal Battery; 1 AC Power Connector	
Warranty	One (1) Year	

Original detailed and highlighted Brochures MUST be submitted

LAPTOP COMPUTER ~ TYPE 7		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	12 th Generation Intel® Core™ i7- (24 MB L3 cache,)	
Graphics	Intel® UHD Graphics	
System Memory	16 GB DDR4 SDRAM	
Memory slots	2 SODIMM	
Storage Subsystem	512 GB PCIe SSD	
Keyboard and Pointing Device	Full-size, spill resistant keyboard; Click pad with multi-touch gesture support	
Audio	Stereo speakers, integrated microphone	
Integrated fingerprint reader	Yes	
Webcam	Built-in HD webcam	
Wireless Technology	Intel® 802.11ac 6 (2x2) WLAN and Bluetooth 5 Combo	
Display	14" diagonal, FHD, IPS, anti-glare touch screen	
I/O interface ports	1 * USB 3.1 Type-C; 2 * USB 3.1; 1 * USB 2.0; 1 * HDMI; 1 * RJ-45; 1 * headphone/microphone combo	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus license	
Accessories	standard laptop bag (back pack), USB optical mouse, External AC power adapter	
Power subsystem	45 Whr Long-life internal Battery	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 8		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core™ i7	
System Memory	32GB DDR4 Memory Onboard	
Memory Slots	2 SODIMM	
Storage Subsystem	1TB PCIe SSD, Onboard	
Keyboard and Pointing Device	English Backlit Keyboard; Precision touchpad	
Graphics	Intel® Iris Plus Graphics	
Audio	Stereo audio system, microphone	
Integrated fingerprint reader	Yes	
WEBCAM	Integrated HD camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5.0	
Display	13.3-inch WLED, Non-Touch Display	
I/O interface ports	2 * Thunderbolt. 1 * USB 3.1 Gen 1 Type C port 1 * microSD-card reader 1 * Universal audio jack	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (backpack), USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	51 Whr, Integrated battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 9		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core™ i7	
System Memory	32GB DDR4 Memory Onboard	
Memory Slots	2 SODIMM	
Storage Subsystem	1TB PCIe SSD, Onboard	
Keyboard and Pointing Device	English Backlit Keyboard; Precision touchpad	
Graphics	Intel® Iris Plus Graphics	
Audio	Stereo audio system, microphone	
Integrated fingerprint	Yes	
WEBCAM	Integrated HD camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5.0	
Display	13.3-inch WLED, Non-Touch Display	
I/O interface ports	2 * Thunderbolt; 1 * USB 3.1 Gen 1 Type C port 1 * microSD-card reader 1 * Universal audio jack	
Operating System	DOS	
Software	None	
Accessories	Standard laptop bag (back pack), USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	51 WHr, Integrated battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 10		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	12 th Generation Intel® Core™ i7 Processor	
System Memory	12GB, DDR4, Onboard	
Storage Subsystem	512GB M.2 PCIe SSD, Onboard	
Keyboard and Pointing Device	English Backlit Keyboard; Precision touchpad	
Graphics	Intel® Iris Plus Graphics	
Audio	Stereo audio system, microphone	
Integrated fingerprint reader	Yes	
WEBCAM	Integrated HD camera	
Wireless Technology	Intel® Wi-Fi 6 (2x2) Wi-Fi + Bluetooth 5.0	
Display	14.0-inch IPS LED-Backlit Touch Display	
I/O interface ports	1 * SD Card Reader; 2 * USB 3.2 Gen 1; 1 * Headphone/Microphone Combo; 1 * Power jack; 1 * HDMI;	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, license	
Accessories	Standard laptop bag (back pack), USB optical mouse, External AC power adapter	
Power subsystem	40WHr (Integrated) Battery	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 11		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core i7 Processor	
System Memory	8GB, DDR3, Onboard	
Storage Subsystem	512 GB PCIe SSD, Onboard	
Keyboard and Pointing Device	English Backlit Keyboard; Precision touchpad	
Graphics	Intel® UHD Graphics	
Audio	Stereo audio system, microphone	
Integrated fingerprint reader	Yes	
WEBCAM	Integrated HD camera	
Wireless Technology	Wi-Fi 6 (2x2) Wi-Fi + Bluetooth 5.0	
Display	13.3-inch FHD Non-Touch Display	
I/O interface ports	2 * Thunderbolt™ 3; 1 * USB 3.1 Gen 1 Type C 1 * microSD-card reader 1 * Universal audio port	
Operating System	Genuine Windows 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (back pack); USB Optical Mouse; USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	52WHr (Integrated) Battery; 1 AC Power	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 12		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core™ i7	
Graphics	Intel® UHD Graphics	
System Memory	8 GB SDRAM (onboard)	
Storage Subsystem	256 GB SSD	
Keyboard and Pointing Device	Full-size island-style backlit keyboard; Image pad with multi-touch gesture support	
Audio	Stereo audio system	
	combo microphone in/audio out	
Sensors	Accelerometer; Gyroscope; e-Compass	
Integrated fingerprint reader	Yes	
WEBCAM	HD IR camera	
Wireless Technology	Intel® Wi-Fi® 6 and Bluetooth® 5 Combo	
Display	13.3" FHD IPS touch screen with Corning®	
I/O interface ports	2 * Thunderbolt™ 3.0; 1 * USB Type-C™ 3.1;	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed CDs	
Accessories	Standard laptop bag (back pack); USB mouse; USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter; Digital pen	
Power subsystem	54 Whr Li-ion battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 13		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core™ i7 vPro	
System Memory	16 GB DDR4 Memory Onboard	
Storage Subsystem	1TB PCIe SSD Onboard	
Keyboard and Pointing Device	Spill resistant Backlit Keyboard; Precision touchpad	
Graphics	Intel UHD Graphics	
Audio	Dolby Audio Premium; Dual microphones	
Integrated fingerprint reader	Yes	
WEBCAM	Integrated HD 720p camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5; Integrated Global Mobile Broadband LTE	
Display	14" IPS Touch display with Dolby Vision®	
I/O interface ports	2* USB 3.1 (Gen 1); 2 * USB-C (1 Thunderbolt); 1 * MicroSD card reader; 1 * Smart card reader; 1 * Micro-SIM slot; 1 * Headphone / mic combo; 1 * HDMI; 1 * RJ45	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with	
Accessories	Standard laptop bag (back pack), USB Optical Mouse	
Power subsystem	50 Whr, Integrated battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 14		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core™ i7	
System Memory	8 GB DDR4 Memory Onboard	
Storage Subsystem	512 B PCIe SSD Onboard	
Keyboard and Pointing Device	Spill resistant Backlit Keyboard; Precision touchpad	
Graphics	Intel UHD Graphics	
Audio	Dolby Audio™ Premium; Dual microphones	
Integrated fingerprint reader	Yes	
WEBCAM	Integrated HD 720p camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5; Integrated Global Mobile Broadband LTE	
Display	14" WQHD IPS Touch display with Dolby Vision	
I/O interface ports	2* USB 3.1; 2 * USB-C; 1 * MicroSD card reader; 1 * Smart card reader; 1 * Micro-SIM slot; 1 * Headphone / mic combo; 1 * HDMI; 1 * RJ45	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus license	
Accessories	Standard laptop bag (back pack), USB Optical Mouse	
Power subsystem	50 WHr, Integrated battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 15		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	12th Gen Intel® Core™ i7	
System Memory	16 GB DDR4 Memory Onboard	
Storage Subsystem	512GB SSD Onboard	
Storage acceleration	32GB	
Keyboard and Pointing Device	Full-sized keyboard with backlight; Precision touchpad	
Graphics	Integrated Intel® UHD Graphics	
Audio	Dolby Audio™, microphone	
Integrated fingerprint reader	Yes	
Digital pen support	Ye	
WEBCAM	1M slim camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5.0	
Display	13.3" FHD, IPS, multi-touch display	
I/O interface ports	1 * USB-C (DisplayPort, power delivery) 2 * USB 3.0 1 * HDMI 1 * Headphone / mic combo	
Operating System	Genuine Windows 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (back pack); USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter; Digital pen	
Power subsystem	54 Whr, Integrated long life battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 16		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	12th Gen Intel® Core i9	
System Memory	32 GB DDR4 Memory Onboard	
Storage Subsystem	1TB SSD Onboard	
Keyboard and Pointing Device	Full-sized keyboard with backlight with numeric keypad; Precision touchpad	
Graphics	Integrated Intel® UHD Graphics	
Audio	HD audio with stereo speakers	
Integrated fingerprint reader	Yes	
WEBCAM	720p HD camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5.0	
Display	15.6" FHD, IPS, multi-touch display	
I/O interface ports	1 * USB-C (DisplayPort, power delivery) 3 * USB type A 1 * HDMI 1 * Headphone / mic combo 1 * RJ45	
Operating System	Genuine Windows 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet	
Accessories	Standard laptop bag (back pack); USB Optical Mouse,	
Power subsystem	83 Whr, Integrated long life battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 17		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	12th Gen Intel® Core i9	
System Memory	16 GB DDR4 Memory Onboard	
Storage Subsystem	1TB SSD Onboard	
Keyboard and Pointing Device	QWERTY backlit keyboard; Precision touchpad	
Graphics	NVIDIA GeForce RTX	
Audio	HD audio with stereo speakers	
WEBCAM	720p HD camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5.0	
Display	15.6" OLED touch display	
I/O interface ports	1 * USB-C (DisplayPort, power delivery) 2 * Thunderbolt 4 1 * HDMI 1 * Headphone / mic combo	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (back pack); USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	Integrated 86 Whr, Integrated long life battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 18		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11th Gen Intel® Core™ i7, 12 l3 cache	
System Memory	16 GB DDR4 Memory Onboard	
Storage Subsystem	1 TB SSD Onboard	
Keyboard and Pointing Device	Full-sized keyboard with backlight; Precision touchpad	
Graphics	Intel® Iris Xe Graphics	
Audio	Stereo speakers, microphone	
WEBCAM	720P HD camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5.0	
Display	14.0" FHD Anti-glare LED backlight non-touch	
I/O interface ports	1 * USB-C (DisplayPort, power delivery) 2 * USB 3.2 type A 1 * HDMI 1 * Headphone / mic combo 1 * MicroSD-card slot	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (back pack); USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	54 Whr, Integrated long life battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 19		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11th Gen Intel® Core™ i7, 12 l3 cache	
System Memory	16 GB DDR4 Memory Onboard	
Storage Subsystem	1 TB SSD Onboard	
Keyboard and Pointing Device	Full-sized keyboard with backlight; Precision touchpad	
Graphics	Intel® Iris Xe Graphics	
Audio	Stereo speakers, microphone	
WEBCAM	720P HD camera	
Wireless Technology	Wi-Fi 6 (2 x 2) and Bluetooth 5.0	
Display	14.0' FHD Anti-glare LED backlight non-touch display	
I/O interface ports	1 * USB-C (DisplayPort, power delivery) 2 * USB 3.2 type A 1 * HDMI 1 * Headphone / mic combo 1 * Micro SD-card slot	
Operating System	Genuine Windows 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 professional or later version, perpetual license with CDs; Latest Version of internet security anti-virus, licensed	
Accessories	Standard laptop bag (back pack); USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	54 Whr, Integrated long life battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER TYPE 20		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE
Processor & Core Logic	Apple M1 chip with 8-core CPU and 8 core GPU	
System Memory	8GB LPDDR onboard memory, upgradable	
Storage Subsystem	512GB PCIe-based SSD, upgradable	
Power System	Built-in 49.9-watt-hour lithium-polymer battery; USB-C Power Adapter	
Display/Graphics	13.3-inch LED-backlit display with IPS technology; Intel Iris Plus Graphics	
Keyboard and Pointing	Backlit magic keyboard; Touch trackpad	
Audio	Stereo speakers; Dual microphones	
Communication	Wi-Fi 6 wireless networking; Bluetooth 5.0 wireless	
I/O interface ports	2 * Thunderbolt 3 (USB - C) ports; 1 * USB 3.1 Gen 2 port; 1 * headphone jack port	
Operating System	Mac OS, latest version	
Software	Office for Mac devices, licensed and activated	
Accessories	Executive bag, Magic Mouse; AC Power Adapter; USB-C Charge Cable; USB-C to	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 21

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core logic	Quad-core Intel Core i7	
System Memory	16GB DDR4 onboard memory, upgradable	
Storage Subsystem	1TB SSD, upgradable	
Power System	Built-in 58.0-watt-hour lithium-polymer battery; USB-C Power Adapter	
Display/Graphics	13.3-inch (diagonal) LED-backlit display with IPS technology; Intel Iris Plus Graphics	
Keyboard and Pointing	Backlit magic keyboard; Touch trackpad	
Audio	Stereo speakers; Dual microphones	
Communication	802.11ac Wi-Fi 6 networking; Bluetooth 5.0 wireless technology	
I/O interface ports	2 * Thunderbolt 3 (USB - C) ports; 1 * headphone jack port; 1 * USB 3.1 Gen 2 port	
Operating System	Mac OS, latest version	
Software	Office for Mac devices, licensed and activated	
Accessories	Executive bag, Magic Mouse; USB-C Power Adapter; USB-C Charge Cable; USB-C to HDMI/VGA/Ethernet/USB3.0/DVI Adapter	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 22

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core logic	Quad-core Intel Core i7 with 8MB shared L3	
System Memory	16GB DDR4 onboard memory, upgradable	
Storage Subsystem	1TB SSD, upgradable	
Power System	Built-in 70.0-watt-hour lithium-polymer battery; USB-C Power Adapter	
Display/Graphics	14.2-inch (diagonal) LED-backlit display with IPS technology; Intel Iris Plus Graphics	
Keyboard and Pointing	Backlit magic keyboard; Touch trackpad	
Audio	Stereo speakers; Dual microphones	
Communication	802.11ac Wi-Fi 6 networking, IEEE 802.11a/b/g/n compatible; Bluetooth 5.0 wireless technology	
I/O interface ports	3 * Thunderbolt 3 (USB - C) ports; 1 * headphone jack port; 1 * HDMI 1* SD Card	
Operating System	Mac OS, latest version	
Software	Office for Mac devices, licensed and activated	
Accessories	Executive bag; Magic Mouse; USB-C Power Adapter; USB-C Charge Cable; USB-C to HDMI/VGA/Ethernet/USB3.0/DVI Adapter	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 23

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & data bus	Apple M1 chip with 10-core CPU and 16 core GPU	
System Memory	16GB DDR4 onboard memory, upgradable	
Storage Subsystem	1TB SSD, upgradable	
Power System	Built-in 100-watt-hour lithium-polymer battery; USB-C Power Adapter	
Display/Graphics	16-inch (diagonal) LED-backlit display with IPS technology; Intel UHD Graphics	
Keyboard and	Backlit magic keyboard; Touch trackpad	
Audio	Stereo speakers; Dual microphones	
Communication	802.11ac Wi-Fi 6; Bluetooth 5.0	
I/O interface ports	4 * Thunderbolt 3 (USB - C) ports; 1 * headphone jack port; 1 * HDMI; 1 * Headphone;	
Operating System	Mac OS, latest version	
Software	Latest Office for Mac devices, licensed and activated	
Accessories	Executive bag, Magic Mouse; USB-C Power Adapter; USB-C Charge Cable; USB-C to HDMI/VGA/Ethernet/USB3.0/DVI Adapter	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 24		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core	11 th Generation Intel® Corei5 vPro	
System Memory	8GB LPDDR	
Storage	512 GB, SSD	
Keyboard and Graphics	Full-sized keyboard with backlight; Precision touchpad Integrated Intel® UHD Graphics	
Audio	High-quality speaker, integrated noise-reducing microphones, stereo headphone/microphone combo jack	
Security	Steel reinforced cable lock slot; fingerprint reader; Contactless SmartCard reader; advanced authentication/Data Protection Encryption; Backup and Recovery	
Sensors	Accelerometer (free fall), Ambient Light Sensor, Digital Compass, Gyro, Lid Sensor, SAR Sensor	
WEBCAM	5 MP IR Front camera and 8 MP Rear Camera with Privacy	
Connectivity	Intel® Wi-Fi 6 (2 x 2); Bluetooth 5.0; 4G/LTE broadband card; Dedicated GPS card	
Display	11.6-inch, FHD Outdoor-Readable, Anti-Glare, Anti-Smudge, Polarizer, touchscreen	
I/O interface ports	1 * USB 3.1 Type-A; 1*USB 3.1 Gen2 Type-C; 1 * Combo Mic/Headphone Jack; 1 * Micro Serial RS-232 port; Micro SD and SIM card slot; lock slot	
Operating System	Genuine Windows® 10 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 or later perpetual license with CDs; Latest Version of internet security anti-virus license	
Environmental Compliance	Compliance testing: • MIL-STD-810H compliant (Transit drop, rain, dust, sand, vibration, functional shock, humidity, salt fog, altitude, explosive atmosphere, solar radiation, thermal extremes, thermal shock, freeze/thaw, tactical standby to operational); • Operating thermal range (on AC Power): -20°F to 145°F (-29°C to 63°C); • IP65 Ingress protection (dust-tight, protected against pressurized water); • Hazardous locations certifications	
Accessories	Specialized laptop bag (back pack); USB Optical Mouse, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	Dual Hot-swappable 53 Whr Lithium Ion Battery; Rugged Elbow A/C Adapter	
Warranty	Three (3) Years	
Original detailed and highlighted Brochures MUST be		

LAPTOP COMPUTER ~ TYPE 25		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel® Core™ i7, vPro	
System Memory	16GB LPDDR	
Storage Subsystem	1 TB, SSD	
Keyboard and Pointing Device	Full-sized keyboard with backlight; Precision	
Graphics	Integrated Intel® UHD Graphics	
Audio	High-quality speaker, integrated noise-reducing microphones, stereo	
Security	Steel reinforced cable lock slot; fingerprint reader; Contactless Smartcard reader; advanced authentication/Data Protection	
Sensors	Accelerometer (free fall), Ambient Light Sensor, Digital Compass, Gyro, Lid Sensor, SAR	
WEBCAM	5 MP IR Front camera and 8 MP Rear camera	
Connectivity	Intel® Wi-Fi 6 (2 x 2); Bluetooth 5.0; 4G/LTE Wireless broadband card; Dedicated GPS card	
Display	11.6-inch, FHD Outdoor-Readable, Anti-Glare, Anti-Smudge, Polarizer touchscreen	
I/O interface ports	1 * USB 3.1 Type-A; 1*USB 3.1 Gen2 Type-C; 1 * Combo Mic/Headphone Jack; 1 * Micro Serial RS-232 port; Micro SD and SIM card slot; lock slot	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with	
Software	MS Office 2019 professional or later perpetual license with CDs; Latest Version of internet security	
Environmental Compliance	Compliance testing: - MIL-STD-810H compliant (Transit drop, rain, dust, sand, vibration, functional shock, humidity, salt fog, altitude, explosive atmosphere, solar radiation, thermal extremes, thermal shock, freeze/thaw, tactical standby to operational); - Operating thermal range (on AC Power): -20°F to 145°F (-29°C to 63°C);	
Accessories	Specialized laptop bag (back pack); USB Optical Mouse, USB-C to	
Power subsystem	Dual Hot-swappable 53 Whr Lithium Ion Battery; Rugged A/C Adapter	
Warranty	Three (3) Years	
Original detailed and highlighted Brochures MUST be		

LAPTOP COMPUTER - TYPE 26		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Gen Intel® Core™ i5 quad-core processors	
System Memory	16GB DDR4	
Storage Subsystem	512 TB PCIe SSD	
Keyboard and Pointing Device	Full-sized keyboard with backlight; Precision touchpad	
Graphics	Integrated Intel® UHD Graphics	
Audio	High-quality stereo Speaker, headphone/microphone combo jack	
Security	Steel reinforced cable lock slot; fingerprint reader; Contactless Smartcard reader; advanced authentication/Data Protection Encryption; Backup and Recovery	
Optical drive	DVD-ROM, DVD+/-RW	
WEBCAM	IR camera with privacy shutter	
Wireless	Intel® Wi-Fi 6 (2 x 2); Bluetooth 5.0; 4G/LTE Wireless broadband card; Dedicated GPS card.	
Display	14' FHD Anti-Glare touch display	
I/O interface ports	2 * USB 3.1 Gen1 Type A; 1 * USB 3.1 Gen 1 Type-C; 1 * native RS-232 serial port; 1 * RJ-45; 1 * HDMI; 1 * Universal Audio Jack; 1 * VGA, Display Port; SD and SIM card slots	
Operating System	Genuine Windows® 11 Professional 64-bit, Licensed (with back up CDs)	
Software	MS Office 2019 profession, perpetual license with CDs; Latest Version of anti-virus with licensed CDs	

Environmental Compliance	Compliance testing: • MIL-STD-810H compliant (Transit drop, rain, dust, sand, vibration, functional shock, humidity, salt fog, altitude, explosive atmosphere, solar radiation, thermal extremes, thermal shock, freeze/thaw, tactical standby to operational); • Operating thermal range (on AC Power): - 20°F to 145°F (-29°C to 63°C); • IP65 Ingress protection (dust-tight, protected against pressurized water); Hazardous locations certifications; Electromagnetic interference	
Accessories	Specialized laptop bag (back pack); USB Optical Mouse	
Power subsystem	51 Whr lithium-ion battery, supporting hot-swap; Rugged A/C Adapter	
Warranty	Three (3) Years	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 27

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11th Gen Intel® Core™ i7 quad-core processors	
System Memory	32GB	
Storage Subsystem	1TB PCIe SSD	
Keyboard and Pointing Device	Full-sized keyboard with backlight; Precision touchpad	
Graphics	Integrated Intel® UHD Graphics	
Audio	Stereo Speaker, headphone/microphone combo jack	
Security	Steel reinforced cable lock slot; fingerprint reader; Contactless Smartcard reader; advanced authentication/Data Protection Encryption; Backup and Recovery	
Digital pen support	Yes	
WEBCAM	IR camera with privacy shutter	
Connectivity	Intel® Wi-Fi 6 (2 x 2); Bluetooth 5.0; 4G/LTE Wireless broadband card; Dedicated GPS card.	
Display	13.3" FHD Anti-Glare display	
I/O interface ports	2 * USB 3.1 Gen1 Type A; 1 * USB 3.1 Gen 1 Type-C; 1 * native RS-232 serial port; 1 * RJ-11 5 gigabit Ethernet network connector; 1 * HDMI; 1 * Universal Audio Jack; 1 * VGA, Display Port; SD and SIM card slots	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed with	
Software	MS Office 2019 professional or later perpetual license with CDs; Latest Version of internet security anti-virus license	
Environmental Compliance	Compliance testing: - MIL-STD-810H compliant (Transit drop, rain, dust, sand, vibration, functional shock, humidity, salt fog, altitude, explosive atmosphere, solar radiation, thermal extremes, thermal shock, freeze/thaw, tactical standby to operational); - Operating thermal range (on AC Power): -20°F to 145°F (-29°C to 63°C); - IP65 Ingress protection (dust-tight, protected against pressurized water); - Hazardous locations certifications	
Accessories	Specialized laptop bag (back pack); USB Optical Mouse; Digital pen	

Power subsystem	51 Whr lithium-ion battery supporting hot-swap; 90whr Rugged A/C Adapter	
Warranty	Three (3) Years	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 28		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	Quad-core 12th Gen Intel® Core™ i7 Processor	
System Memory	16GB LPDDR4 RAM	
Storage Subsystem	1TB SSD	
Keyboard and Pointing Device	Full size Backlit Metallic Keyboard; click pad with multi-touch gesture support	
Graphics	Intel® Iris Graphics	
Audio	Speakers with Dolby® Audio™, microphone	
Security	Enterprise-grade protection	
WEBCAM	720p HD camera	
Wireless Technology	Wi-Fi 6: 802.11ax compatible and Bluetooth® 5 Combo	
Display	Screen: 13.5” PixelSense™ Display, multi-touch, Pen	
I/O interface ports	1 * USB-C 1 * USB-A 1 * 3.5 mm headphone jack 1 * Surface Connect port	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office 2019 or later perpetual license with CDs; Latest Version of internet security anti-virus software, licensed	
Accessories	Standard laptop bag (back pack), Mobile Bluetooth Mouse, digital pen, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter (Microsoft USB-C Travel Hub)	
Power subsystem	17 hours long battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 29

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the
Processor & Core Logic	Quad-core 12th Gen Intel® Core™ i7 Processor	
System Memory	16GB LPDDR4 RAM	
Storage Subsystem	1TB SSD	
Keyboard and Pointing Device	Full size Backlit Metallic Keyboard; click pad with multi-touch gesture support	
Graphics	Intel® Iris Graphics	
Audio	Speakers with Dolby® Audio™, microphone	
Security	Enterprise-grade protection	
WEBCAM	720p HD camera	
Wireless Technology	Wi-Fi 6: 802.11ax compatible and Bluetooth® 5 Combo	
Display	15', multi-touch, Pen enabled display	
I/O interface ports	1 * USB-C 1 * USB-A 1 * 3.5 mm headphone jack 1 * Surface Connect port	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with 1-year GR)	
Software	MS Office 2019 or later perpetual license with CDs; Latest Version of internet security anti-virus software, licensed	
Accessories	Standard laptop bag (back pack), Mobile Bluetooth Mouse, digital pen, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter (Microsoft USB-C® Travel Hub)	
Power subsystem	17 hours long battery; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER ~ TYPE 30		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	Quad-core 12 th Gen Intel® Core™ i5	
System Memory	8GB LPDDR4 RAM	
Storage Subsystem	512GB, PCIe SSD	
Keyboard and Pointing Device	Full size Backlit Metallic Keyboard; click pad with multi-touch gesture support	
Graphics	Intel® Iris™ Plus Graphics	
Audio	Stereo speakers with Dolby® Audio™;	
Security	Enterprise-grade protection	
WEBCAM	720p HD camera	
Wireless Technology	Wi-Fi6 (802.11ax compatible); Bluetooth Wireless 5.0 technology	
Sensors	Ambient light sensor; Proximity sensor; Accelerometer; Gyroscope;	
Display	13.5" Multi-touch Display;	
I/O interface ports	2 * USB type-A; 1 * USB Type-C; 1 * 3.5mm headphone jack; 2 * Surface Connect ports; 1 * Full-size SDXC card reader	
Operating System	Genuine Windows® 10 Professional 64-bit, licensed (with back up CD)	
Software	MS Office Professional 2019 or later perpetual license with CDs; Latest	
Accessories	Standard laptop bag (back pack), Mobile Bluetooth Mouse, digital pen, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	15 hours long battery; 1 AC Power	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER - TYPE 31		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	Quad-core 12 th Gen Intel® Core™ i7 Processor	
System Memory	16GB	
Storage Subsystem	512GB, Intel® SSD	
Keyboard and Pointing Device	Full size Backlit Metallic Keyboard; click pad with multi-touch gesture support	
Graphics	Intel® Iris™ Plus Graphics	
Audio	Stereo speakers with Dolby® Audio™;	
Security	Enterprise-grade protection	
WEBCAM	720p HD camera	
Wireless Technology	Wi-Fi 6 (802.11ax compatible); Bluetooth Wireless 5.0 technology	
Sensors	Ambient light sensor; Proximity sensor; Accelerometer; Gyroscope; Magnetometer	
Display	12.3" multi-touch Display;	
I/O interface ports	2 * USB type-A; 1 * USB Type-C; 1 * 3.5mm headphone jack; 2 * Surface Connect ports; 1 * Full-size SDXC card reader 1 * Nano-sim	
Operating System	Genuine Windows® 11 Professional 64-bit, licensed (with back up CD)	
Software	MS Office Professional 2019 or later perpetual license with CDs; Latest Version	
Accessories	Standard laptop bag (back pack), Mobile Bluetooth Mouse, digital pen, USB-C to HDMI/VGA/Ethernet/USB3.0 Adapter	
Power subsystem	15 hours long battery; 1 AC Power	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER TYPE 32		
ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	11 th Generation Intel Core i3, 6 MB L3 cache	
System Memory	4 GB DDR4	
Storage Subsystem	512 GB HDD	
Keyboard and Pointing Device	Backlit Keyboard; click pad with multi-touch gesture support	
Graphics	Intel Iris Xe Graphics	
Audio	Dual stereo speakers	
Integrated fingerprint reader	Yes	
WEBCAM	Integrated HD Webcam	
Wireless Technology	Intel Wi-Fi 5.0 and Bluetooth 5.0 combo	
Display	14-inch, FHD, Anti-Glare, Display	
I/O interface ports	1 * USB 2.0; 1 * USB 3.2 Type-C; 2 * USB 3.2 Type-A; 1 * headphone/microphone combo; 1 * HDMI; 1 * AC power; 1 * Ethernet RJ-45 1 * Media Card Reader	
Operating System	Ubuntu	
Software	Open office	
Accessories	Standard laptop bag (back pack); USB Optical	
Power subsystem	42 WHr Li-ion; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER TYPE 33

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE
Processor & Core Logic	11 th Generation Intel Core i3, 6 MB L3 cache	
System Memory	4 GB DDR4	
Storage Subsystem	1TB HDD	
Keyboard and Pointing	Backlit Keyboard; click pad with multi-touch gesture	
Graphics	Intel Iris Xe Graphics	
Audio	Dual stereo speakers	
Integrated fingerprint	Yes	
WEBCAM	Integrated HD Webcam	
Wireless Technology	Intel Wi-Fi 5.0 and Bluetooth 5.0 combo	
Display	14-inch, FHD, Anti-Glare, Display	
I/O interface ports	1* USB 2.0; 1* USB 3.2 Type-C; 2*USB 3.2 Type-A; 1 * headphone/microphone combo; 1 * HDMI; 1 * AC power; 1 * Ethernet RJ-45 1 * Media Card Reader	
Operating System	Ubuntu	
Software	Open office	
Accessories	Standard laptop bag (back pack); USB Optical Mouse;	
Power subsystem	42 WHr Li-ion; 1 AC Power Connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER – TYPE 34

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE
Processor & Core Logic	AMD Ryzen 5 (16 MB L3 cache, 6 cores)	
System Memory	8 GB DDR4	
Storage Subsystem	256 GB SSD	
Keyboard and Pointing Device	Full-size keyboard; Image pad with multi-touch gesture support	
Graphics	AMD Radeon Graphics	
Audio	Dual speakers; Audio Boost Webcam	
Integrated fingerprint reader	Yes	
WEBCAM	720P HD camera	
Wireless Technology	802.11b/g/n/ac Wi-Fi 5.0 and Bluetooth 5.0	
Display	14", FHD, IPS display	
I/O interface ports	1*USB Type-C; 1*DisplayPort; 2*USB Type-A; 1*AC smart pin; 1*HDMI 2; 1*Headphone/microphone combo	
Operating System	Windows 11 Home, Genuine license	
Software	Open Office	
Accessories	Standard laptop bag (back pack); USB Optical	
Power subsystem	43 Whr Li-ion; AC Power adopter and connector	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		

LAPTOP COMPUTER – TYPE 35

ITEM	MINIMUM REQUIREMENTS	REFERENCE INFORMATION TO SUPPORT COMPLIANCE (Highlighted in the Brochure)
Processor & Core Logic	AMD Ryzen 5 (16 MB L3 cache, 6 cores)	
System Memory	8 GB DDR4	
Storage Subsystem	256 GB SSD	
Keyboard and Pointing Device	Full-size keyboard; Image pad with multi-touch gesture support	
Graphics	AMD Radeon Graphics	
Audio	Dual speakers; Audio Boost Webcam	
WEBCAM	720P HD camera	
Wireless Technology	802.11b/g/n/ac and Bluetooth Combo	
Display	15.6", FHD, IPS display	
I/O interface ports	1*USB Type-C; 1*DisplayPort; 2*USB Type-A; 1*AC smart pin; 1*HDMI 2; 1*Headphone/microphone combo	
Operating System	Windows 11 Home, Genuine license	
Software	Open office	
Accessories	Standard laptop bag (back pack); USB Optical mouse	
Power subsystem	41 Whr Li-ion; AC Power adopter and	
Warranty	One (1) Year	
Original detailed and highlighted Brochures MUST be submitted		