

BID BULLETIN 01

Date: April 5, 2024

Project Title: Supply and Delivery IT Equipment and Supplies (VSU-GOODS-24-32)

Location: VSU Main, Visca, Baybay City, Leyte

Bidders are hereby informed/reminded of the following addendums/amendments/clarifications:

I. LIST OF REQUIREMENTS

Legal Documents	
1	PhilGEPS Certificate of Registration (Platinum)
Technical Documents	
2	Statement of All On-Going Government & Private Contracts
3	Statement of Bidder's Single Largest Completed Contract (at least 50% of the ABC or Php 2,190,649.50.
	Or
	Statement of at least two (2) similar completed contracts w/ total amount of at least Php 2,190,649.50 and the largest of which should be at least PhP 1,095,324.75
4	Bid Security
5	Technical Specifications
6	SCHEDULE of Requirements/Production and delivery schedule
7	Manpower Requirements
8	After Sales service/parts from acceptance of delivered goods (at leas 1 year for equipment and 3 months for supplies)
9	Original Duly Signed Omnibus Sworn Statement
Financial Documents	
10	The Supplier's Audited Financial Statements
11	Net Financial Contracting Capacity (at least Php 4,381,299.00)
	Or
	Committed Line of Credit (at least Php 438,129.90)
(2 nd Envelope) FINANCIA	AL COMPONENT ENVELOPE
12	Original of duly signed and accomplished Financial Bid Form
13	Original of duly signed and accomplished Price Schedule(s)



Please take note:

- 1. In the **Technical Specifications**, bidders must state either "Comply" or "Not Comply" <u>against each of the individual parameters of the specifications</u> per item stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in the **Bidders Bid** and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature (**Data Sheets**), unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data, and Brand and Model as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provisions of **ITB** Clause 3.1(a)(ii) and/or **GCC** Clause 2.1 (a)(ii).
- 2. Bidders are advised to use the latest GPPB forms for the following documents:
 - a) Omnibus Sworn Statement
 - b) Performance Securing Declaration (if applicable)
 - c) Price Schedule for Goods Offered
 - d) Bid Form
 - e) Bid Securing Declaration

These forms can be accessed from the GPPB website: https://www.gppb.gov.ph/downloadables.php. Documents that are not in its updated/latest format shall be a ground for disqualification of the bidder.

- II. Preparation of Electronic Bid (for bidders who prefer electronic bid submission)
 - 1. Scan per document into Portable Document Format (PDF) and should be printable.
 - 2. Properly label all scanned documents for prompt identification. Filename of documents, whichever are applicable to the bidder, should be as follows:

	Document	Filename (in PDF form)
1.	PhilGEPS Certificate of Registration (Platinum)	PhilGEPS
2.	Statement of On-Going Government	Statement of On-Going
	& Private Contracts	Contracts
3.	Statement of Bidder's Single Largest Completed Contract	SLCC
4.	Statement of at least two (2) similar	Statement of Completed
	completed contracts	Contracts
5.	Bid Security	Bid Security
6.	Technical Specifications	Technical Specifications
7.	SCHEDULE of Requirements/	Schedule of Requirements
8.	Production and delivery schedule	Schedule of Requirements
9.	Manpower Requirements	Manpower Requirements
10.	After Sales service/parts	After Sales
11.	Omnibus Sworn Statement	Omnibus Sworn Statement
12.	Audited Financial Statements	Audited Financial Statements
13.	Net Financial Contracting Capacity	NFCC
14.	Committed Line of Credit	CLC
15.	Bid Form	Bid Form
16.	Price Schedule	Price Schedule



3. Create two (2) folders that are password-protected. The first folder should contain all requirements under Technical Component checklist as presented under Section VIII.

The second folder should contain all requirements under Financial Component checklist.

- 4. Compress the two (2) folders and name as follows: a) first folder: **Technical Documents**, b) second folder: **Financial Documents**.
- 5. Email the 2 compressed folders to Ms. Jessamine C. Ecleo at **jessamine.ecleo@vsu.edu.ph** before the deadline.

III. Changes in the Bidding Documents

Original	
Section I. Invitation to Bid	(Amendment)
5. A complete set of Bidding Documents may be acquired by interested Bidders on 26 March – 16 April 2024 until 8:30 AM from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Thousand Pesos (PhP 5,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.	5. A complete set of Bidding Documents may be acquired by interested Bidders on 26 March – 16 April 2024 until 8:30 AM from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Thousand Pesos (PhP 5,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means: The Bidders may deposit the payment for the bidding documents to the Visayas State University Landbank Account with the following details: Account Name: Visayas State University Fund 164 Account Number: 3572-1000-13 Then send the deposit slip to jessamine.ecleo@vsu.edu.ph
Section II. Instructions to Bidders	(Additional Instructions)
15. Sealing and Marking of Bids	Bidders are requested to submit three (3) copies of its bid – 1 Original, Copy 1, and Copy 2.
	For filing purposes, the bidders are urged to use Orange envelopes for its Technical and Financial Component envelopes, including the Mother (outer) Envelope.



IV. Revised List of Goods and Technical Specifications

- Some Specifications were added (in red font) and/or deleted (in blue font)
- Some Quantities and Unit Prices (ABC) were changed

Item #	Description	Unit	Qty	Unit Price	Total Price
1	1000W Automatic Voltage Regulator	рс	5	5,500.00	27,500.00
	1000W, Servo motor type, 2-universal outlets (220V), 1-universal outlet (110V).				
2	2.5" Internal Solid State Drive (SSD)	рс	20	5,000.00	100,000.00
	Specifications:				
	at least 500 GB, SATA III, sequential read speed up to 560 MB/s, sequential write speed up to 530 MB/s				
3	24-inch Desktop Monitor	рс	5	9,000.00	45,000.00
	23.8" Full HD (1920x1080), 100 Hz, IPS, VESA-wall mountable, low blue light filter, and flicker-free technology				
	Accessories: power cable, HDMI cable.				
4	3D PRINTER	set	1	50,000.00	50,000.00
	Technical Specifications:				
	Extrusion Tech: Independent Dual Direct Drive Metal Extruder (IDEX)				
	●Build Size: 300mm x 300mm x 400mm				
	●Build Plate Size: 310mm*320mm				
	• Printer Size: 653mm*625mm*803mm (Including the filament holder)				
	●Package Size: 730mm*710mm*310mm				
	Net Weight: 15kg				
	●Positioning Accuracy: X/Y: 0.012mm, Z: 0.001mm				
	• Supported Print Materials: PLA, TPU, TPE, HIPS, ABS, PETG, WOOD, PC, PA, PVA, ASA				
	. •Print Speed: 20~120mm/s (suggested 60mm/s)				
	Stock Nozzle Diameter: 0.4 mm				
	Operational Extruder Temperature: Max 260°C				
	Operational Hotbed Temperature: Max 100°C				
	●Input Formats: STL, OBJ, DAE, AMF				
	Ambient Operating Temperature: 8°C-40°C				
	Connectivity: SD Card or Data Cable				
	•7 Step Motors: 42-40 Step Motor*1, 42-34 Step Motor*4, 42-29 Step Motor*2				
5	3-in-1 Printer	рс	1	11,000.00	11,000.00
	Power Consumption: 13 Watt, 3.8 Watt (Standby)				
	Product dimensions: 482 x 300 x 145 mm (Width x Height x Depth)				
	Colour: Black				
	Printer Driver: Windows XP, Windows x64, Windows Vista, Windows Vista x64, Windows 7, Windows 7 x64, Windows 8, Windows 8 x64, Windows 8.1, Windows 8.1 x64, Windows 10, Windows 10 x64				
	Scanner Driver: Windows XP, Windows x64, Windows Vista,				



Windows Visla x64, Windows 7, Windows 7 x64, Windows 10, Windows 10 x64 Driver: Windows XP, Windows 8.1 x64, Windows 8.1 x64, Windows 10 x64 Driver: Windows XP, Windows x64, Windows 8, Windows 8 x64, Windows 8, Windows 8, X64, Windows 8, X64, Windows 8, X64, Windows 10 x64 Print Speed (Black & White): 9 pages/minute Print Speed (Colour): 4 pages/minute Print Speed (Colour): 4 pages/minute Number of Cartridges: 4 Built-in Scanner: Available A4: Available Letter: Available 5000W Automatic Voltage Regulator 5000W, 220V, Servo motor type; 7 All-in-One Ink Tank Printer Wi-Fi Duplex with ADF windows print speeds up to 15pm for black and 8.0ipm for colour watod-oduptex printing Fax and ADF capability / Ethernet 8 Wi-Fi Direct windows printing Fax and ADF capability / Ethernet 8 Wi-Fi Direct windows printing Fax and ADF capability / Ethernet 8 All-in-One Ink Tank Printer with ADF Automatic Voltage Regulatory (AVR), 1500W, heavy duty windows 200, 260,000.00 21,000.00 21,000.00 21,000.00 22,000.00 260,000.00 260,000.00 260,000.00 28,000.00 28,000.00 29,000.00 21,000.00 20,000.00 20,000.00 20,000.00 21,000.00 22,000.00 24,500.00 25,000.00 260,000.00 260,000.00 27,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00 28,000.00						
Driver. Windows XP, Windows x64, Windows 8, Windows 8 Vista x64, Windows 7, Windows 7 x64, Windows 8, Windows 8 x64, Windows 8 x1, Windows 10 x1, Wi						
Vista x64, Windows 7, Windows 7, x64, Windows 8, x64, Windows 8, x64, Windows 8, x64, Windows 8, x64, Windows 10, Windows 10, Windows 10, x64						
X64, Windows 8.1, Windows 8.1 x64, Windows 10, Windows 10 x64						
10 x64						
Print Speed (Colour): 4 pages/minute Number of Cartridges: 4 Built-in Scanner: Available A4: Available Letter: Available A5: Available Letter: Available A5: Available Letter: Available A5: Available Letter: Available A5: Available DSB Port: Available DSB Por						
Print Speed (Colour): 4 pages/minute Number of Cartridges: 4 Built-in Scanner: Available A4: Available Letter: Available A5: Available Letter: Available A5: Available Letter: Available A5: Available Letter: Available A5: Available DSB Port: Available DSB Por						
Built-in Scanner: Āvailable		Print Speed (Colour): 4 pages/minute				
A4: Available Letter: Available Letter: Available A5: Available USB Port: Service Usb		Number of Cartridges: 4				
Letter: Available		Built-in Scanner: Available				
A5: Available USB Port: Available Usb		A4: Available				
USB Port: Available		Letter: Available				
5000W Automatic Voltage Regulator pc 3 9,500.00 28,500.00 5000W, 220V, Servo motor type;		A5: Available				
S000W, 220V, Servo motor type: All-in-One Ink Tank Printer Wi-Fi Duplex with ADF unit 1 24,500.00 24,500.00 ©Compact integrated tank design		USB Port: Available				
7 All-in-One Ink Tank Printer Wi-Fi Duplex with ADF © Compact integrated tank design © Print speeds up to 15ipm for black and 8.0ipm for colour © Auto-duplex printing Fax and ADF capability / Ethemet & © Wi-Fi Direct © Borderless Printing up to A4 size © Spill-free ink refilling © Control Panel: 2.4 " Colour LCD Touch Panel 8 All-in-One Ink Tank Printer with ADF 9 Automatic Voltage Regulatory (AVR), 1500W, heavy duty © Input: 220volts © Power: 1500watts © Output: 110-220 volts © Range voltage 120v-220 volts © Servo motor controlled 10 Cisco VOIP phone Cisco VOIP phone Cisco VOIP phone Cisco CP-7821-3PCC or Cisco CP-6821-3PCC 2 channels with power supply (Existing VSU IPPhone Fleet) 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor © Panel Type: IPS © Brightness(Typical): 250cd/m² © Brightness(Typical): 250cd/m² © Contrast Ratio Static: 100:1(typical) © Dynamic Contrast Ratio: MegaFlat © Response Time: 5ms(GTG) © Max Refresh Rate: Max 75Hz © Interface: D-sub(x1), HDMI(x1) Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00 24,500.00 24,500.00 24,500.00 24,500.00 25,500.00 26,500.00 26,000.0	6	5000W Automatic Voltage Regulator	рс	3	9,500.00	28,500.00
■Compact integrated tank design ■Print speeds up to 15ipm for black and 8.0ipm for colour ■Auto-duplex printing Fax and ADF capability / Ethemet & ■Wir-Fi Direct ■Borderless Printing up to A4 size ■Spill-free ink refilling ■Control Panel: 2.4 "Colour LCD Touch Panel 3 All-in-One Ink Tank Printer with ADF pc 2 15,500.00 31,000.00 9 Automatic Voltage Regulatory (AVR), 1500W, heavy duty unit 3 7,000.00 21,000.00 ■Input: 220volts □ ■Power. 1500watts □ ■Output: 110-220 volts □ ■Range voltage 120v-220 volts □ ■Servo motor controlled □ 10 Cisco VOIP phone pc 13 20,000.00 260,000.00 Cisco CP-7821-3PCC or Cisco CP-6821-3PCC □ 2 channels with power supply (Existing VSU IPPhone Fleet) □ 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set 11 10,500.00 115,500.00 ■Panel Type: IPS □ ■Brightness(Typical): 250cd/m² □ ■Brightness(Min): 200cd/m² □ ■Contrast Ratio Static: 1000:1(typical) □ ■Dynamic Contrast Ratio: MegaFlat □ ■Resolution: 1920x1080 □		5000W, 220V, Servo motor type;				
### Print speeds up to 15ipm for black and 8.0ipm for colour ###################################	7	All-in-One Ink Tank Printer Wi-Fi Duplex with ADF	unit	1	24,500.00	24,500.00
■Auto-duplex printing Fax and ADF capability / Ethernet & ■Wi-Fi Direct ■Borderless Printing up to A4 size ■Spill-free ink refilling ■Control Panel: 2.4 "Colour LCD Touch Panel 8 All-in-One Ink Tank Printer with ADF pc 9 Automatic Voltage Regulatory (AVR), 1500W, heavy duty unit ■Input: 220volts pc ■Power: 1500watts and 10 Cisco VOIP phone ■Range voltage 120v-220 volts pc ■Servo motor controlled pc 10 Cisco VOIP phone pc 2 channels with power supply (Existing VSU IPPhone Fleet) 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set ■Panel Type: IPS and 11 10,500.00 ■Brightness(Typical): 250cd/m² and 20,000.00 ■Brightness(Min): 200cd/m³ and Contrast Ratio Static: 1000:1(typical) ■Dynamic Contrast Ratio: MegaFlat and Response Time: 5ms(GTG) ■Max Refresh Rate: Max 75Hz and Max Refresh Rate: Max 75Hz ■Interface: D-sub(x1), HDMI(x1) and 214,000.00 12 Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00		■Compact integrated tank design				
BWi-Fi Direct		■Print speeds up to 15ipm for black and 8.0ipm for colour				
■ Spill-free ink refilling ■ Control Panel: 2.4 " Colour LCD Touch Panel 8 All-in-One Ink Tank Printer with ADF 9 Automatic Voltage Regulatory (AVR), 1500W, heavy duty unit 3 7,000.00 21,000.00 ■ Input: 220volts ■ Power: 1500watts ■ Output: 110-220 volts ■ Range voltage 120v-220 volts ■ Servo motor controlled 10 Cisco VOIP phone Cisco CP-7821-3PCC or Cisco CP-6821-3PCC 2 channels with power supply (Existing VSU IPPhone Fleet) 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor ■ Panel Type: IPS ■ Brightness(Typical): 250cd/m² ■ Brightness(Min): 200cd/m³ ■ Contrast Ratio Static: 1000:1(typical) ■ Dynamic Contrast Ratio: MegaFlat ■ Resolution: 1920x1080 ■ Response Time: 5ms(GTG) ■ Max Color Support: Max 16.7M ■ Max Refresh Rate: Max 75Hz ■ Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00 21,000.00 31,000		■Auto-duplex printing Fax and ADF capability / Ethernet &				
Spill-free ink refilling		■ Wi-Fi Direct				
MacControl Panel: 2.4		■Borderless Printing up to A4 size				
All-in-One Ink Tank Printer with ADF		■Spill-free ink refilling				
9 Automatic Voltage Regulatory (AVR), 1500W, heavy duty unit 3 7,000.00 21,000.00 Imput: 220volts Imput: 1500watts Imput: 110-220 volts Imput: 110-220 volts Imput: 110-220 volts Imput: 120watts		■Control Panel: 2.4 " Colour LCD Touch Panel				
■Input: 220volts	8	All-in-One Ink Tank Printer with ADF	рс	2	15,500.00	31,000.00
®Power: 1500watts □ Output: 110-220 volts ®Range voltage 120v-220 volts □ Output: 110-220 volts ®Servo motor controlled □ Output Servo motor controlled 10 Cisco VOIP phone pc 13 20,000.00 260,000.00 Cisco CP-7821-3PCC or Cisco CP-6821-3PCC □ Output Monitor 24", IPS, Bezel-less Full HD Monitor 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set 11 10,500.00 115,500.00 ®Panel Type: IPS □ Output IPS ®Brightness(Typical): 250cd/m² □ Output IPS ®Brightness(Min): 200cd/m² □ Output IPS ®Contrast Ratio Static: 1000:1(typical) □ Output IPS ®Dynamic Contrast Ratio: MegaFlat □ Output IPS ®Response Time: 5ms(GTG) □ Output IPS ®Max Color Support: Max 16.7M □ Output IPS ®Interface: D-sub(x1), HDMI(x1) □ Output IPS 12 Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00	9	Automatic Voltage Regulatory (AVR), 1500W, heavy duty	unit	3	7,000.00	21,000.00
■ Output: 110-220 volts ■ Range voltage 120v-220 volts ■ Servo motor controlled 10 Cisco VOIP phone pc 13 20,000.00 260,000.00 Cisco CP-7821-3PCC or Cisco CP-6821-3PCC 2 channels with power supply (Existing VSU IPPhone Fleet) 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set 11 10,500.00 115,500.00 ■Panel Type: IPS ■ Brightness(Typical): 250cd/m² ■ Brightness(Min): 200cd/m² ■ Contrast Ratio Static: 1000:1(typical) ■ Dynamic Contrast Ratio: MegaFlat ■ Resolution: 1920x1080 ■ Response Time: 5ms(GTG) ■ Max Color Support: Max 16.7M ■ Max Refresh Rate: Max 75Hz ■ Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00		■Input: 220volts				
■Range voltage 120v-220 volts ■ Servo motor controlled 10 Cisco VOIP phone pc 13 20,000.00 260,000.00 Cisco CP-7821-3PCC or Cisco CP-6821-3PCC 2 channels with power supply (Existing VSU IPPhone Fleet) 1 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set 11 10,500.00 115,500.00 ■Panel Type: IPS ■ Brightness(Typical): 250cd/m² ■ Existence of the property of the prope		■Power: 1500watts				
Servo motor controlled		Output: 110-220 volts				
10 Cisco VOIP phone pc 13 20,000.00 260,000.00 Cisco CP-7821-3PCC or Cisco CP-6821-3PCC		■Range voltage 120v-220 volts				
Cisco CP-7821-3PCC or Cisco CP-6821-3PCC 2 channels with power supply (Existing VSU IPPhone Fleet) 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set 11 10,500.00 115,500.00 Panel Type: IPS Brightness(Typical): 250cd/m² Brightness(Min): 200cd/m³ Contrast Ratio Static: 1000:1(typical) Dynamic Contrast Ratio: MegaFlat Resolution: 1920x1080 Response Time: 5ms(GTG) Max Color Support: Max 16.7M Max Refresh Rate: Max 75Hz Interface: D-sub(x1), HDMI(x1) Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00 28,000.00		■Servo motor controlled				
2 channels with power supply (Existing VSU IPPhone Fleet) 11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set 11 10,500.00 115,500.00 © Panel Type: IPS © Brightness(Typical): 250cd/m² © Brightness(Min): 200cd/m² © Contrast Ratio Static: 1000:1(typical) © Dynamic Contrast Ratio: MegaFlat © Resolution: 1920x1080 © Response Time: 5ms(GTG) © Max Color Support: Max 16.7M © Max Refresh Rate: Max 75Hz © Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00 28,000.00	10	Cisco VOIP phone	рс	13	20,000.00	260,000.00
11 Computer Monitor 24", IPS, Bezel-less Full HD Monitor set 11 10,500.00 115,500.00 ■Panel Type: IPS ■		Cisco CP-7821-3PCC or Cisco CP-6821-3PCC				
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 ■Brightness(Typical): 250cd/m² ■Brightness(Min): 200cd/m² ■Contrast Ratio Static: 1000:1(typical) ■Dynamic Contrast Ratio: MegaFlat ■Resolution: 1920x1080 ■Response Time: 5ms(GTG) ■Max Color Support: Max 16.7M ■Max Refresh Rate: Max 75Hz ■Interface: D-sub(x1), HDMI(x1) Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00 28,000.00 	11	• • •	set	11	10,500.00	115,500.00
■ Brightness(Min): 200cd/m² ■ Contrast Ratio Static: 1000:1(typical) ■ Dynamic Contrast Ratio: MegaFlat ■ Resolution: 1920x1080 ■ Response Time: 5ms(GTG) ■ Max Color Support: Max 16.7M ■ Max Refresh Rate: Max 75Hz ■ Interface: D-sub(x1), HDMI(x1) Computer Printer, All-in-One/Multifunction Colored-lnk Tank Tank Tank Tank Tank Brightness(Min): 200cd/m² Bri		■Panel Type: IPS				
■Contrast Ratio Static: 1000:1(typical) ■Dynamic Contrast Ratio: MegaFlat ■Resolution: 1920x1080 ■Response Time: 5ms(GTG) ■Max Color Support: Max 16.7M ■Max Refresh Rate: Max 75Hz ■Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00						
■Dynamic Contrast Ratio: MegaFlat ■Resolution: 1920x1080 ■Response Time: 5ms(GTG) ■Max Color Support: Max 16.7M ■Max Refresh Rate: Max 75Hz ■Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00						
■ Resolution: 1920x1080 ■ Response Time: 5ms(GTG) ■ Max Color Support: Max 16.7M ■ Max Refresh Rate: Max 75Hz ■ Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00						
■Response Time: 5ms(GTG) ■Max Color Support: Max 16.7M ■Max Refresh Rate: Max 75Hz ■Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00		, ,				
 Max Color Support: Max 16.7M Max Refresh Rate: Max 75Hz Interface: D-sub(x1), HDMI(x1) Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00 						
■Max Refresh Rate: Max 75Hz ■Interface: D-sub(x1), HDMI(x1) 12 Computer Printer, All-in-One/Multifunction Colored-lnk Tank unit 2 14,000.00 28,000.00		. , ,				
Interface: D-sub(x1), HDMI(x1) Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00 28,000.00		• •				
12 Computer Printer, All-in-One/Multifunction Colored-Ink Tank unit 2 14,000.00 28,000.00						
Tank Unit 2 14,000.00 25,000.00						
■Ultra-low-cost printing: Print up to 4,500 pages in black and	12		unit	2	14.000.00	28.000.00
			•		,	



	7,500 in colour				
	■Next generation ink filling system: Enjoy hassle and mess-				
	free refills with the enhanced ink bottles				
	■Wi-Fi, Wi-Fi Direct & apps: Print from mobile devices				
	■3-in-1: Print, copy & scan and borderless photo printing				
	■Nozzle Configuration: 180 Nozzles Black, 59 Nozzles per				
	Color				
	■Minimum Droplet Size: 3 pl, With Variable-Sized Droplet				
	Technology				
	■Ink Technology: Dye Ink				
	■Printing Resolution: 5,760 x 1,440 DPI				
13	Desktop Computer (i3, 11th Gen) or higher	set	1	40,000.00	40,000.00
	Processor: Intel Core i3-11300 (4cores/8threads)or higher	001		10,000100	10,000100
	Motherboard: Intel H510M Ultra Durable motherboard, Gaming				
	LAN, Anti-Sulfur Resistor, LGA-1200				
	8GB DDR4 2933 DIMM Desktop Memory or higher				
	SSD: 240GB NVMe or higher				
	Keyboard and Mouse Combo				
	Casing with Power Supply				
	Monitor: 18.5 inch, HD Ready (1366 X 768), TN Panel				
	Connectivity Port: 1 VGA Port, 1 HDMI Port / Aspect Ratio:				
	16:9, Brightness (Typical): 200 cd/m2 / Refresh Rate: 60 Hz,				
	Operating System: Genuine Windows 10 Home (OEM)				
	AVR: 500W IC controlled				
14	Desktop computer unit only (ready to use)	unit	5	30,000.00	150,000.00
	Fully assembled with motherboard and case; Drivers and Windows 10/11 (64-bit) OS installed, with power cable, ready to use.			,	·
	Processor: 6 cores, 12 threads, 3.9-4.4 GHz, Multithreading, 16				
	MB L3 cache, with integrated graphics, compatible with				
	MB L3 cache, with integrated graphics, compatible with				
	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz)				
45	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCIe Gen 4.0		•	40,000,00	00.000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz)	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCIe Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCIe Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCIe Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher Motherboard: Intel® H610 Chipset for 12th Gen Intel®	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCIe Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCIe Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCIe 3.0 x4 M.2, High Quality	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCle 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCle 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCIe 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCIe Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCIe 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher ■RAM: 16GB DDR4 3200 MHz CL16, Intel® XMP-ready and	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCle 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher ■RAM: 16GB DDR4 3200 MHz CL16, Intel® XMP-ready and XMP Certified, Low-profile heat spreader design or higher	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCle 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher ■RAM: 16GB DDR4 3200 MHz CL16, Intel® XMP-ready and XMP Certified, Low-profile heat spreader design or higher ■SSD: 512 GB M.2 2280 Form Factor PCle Gen3x4 Interface,	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher □Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher □Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCle 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher □RAM: 16GB DDR4 3200 MHz CL16, Intel® XMP-ready and XMP Certified, Low-profile heat spreader design or higher □SSD: 512 GB M.2 2280 Form Factor PCle Gen3x4 Interface, read up to :1700 MB, write up: 1550 MB/s or higher	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher ■Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher ■Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCle 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher ■RAM: 16GB DDR4 3200 MHz CL16, Intel® XMP-ready and XMP Certified, Low-profile heat spreader design or higher ■SSD: 512 GB M.2 2280 Form Factor PCle Gen3x4 Interface, read up to :1700 MB, write up: 1550 MB/s or higher	unit	2	49,000.00	98,000.00
15	MB L3 cache, with integrated graphics, compatible with Windows 11 (64-bit), compatible with PCle 3.0. RAM: 2 x 8GB (at least 3000 MHz) Storage: at least 480GB, NVMe M.2, PCle Gen 4.0 Desktop Computer, 12Gen Core i5, 16GB RAM, RTX 3050 no Monitor or higher □Processor: Intel® i5-12400F Total Cores: 6, Threads: 12, Max Turbo Frequency: 4.40Ghz, Performance Core Base Frequency: 2.5Ghz, Cache: 18MB or higher □Motherboard: Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM Design, Intel® GbE LAN, NVMe PCle 3.0 x4 M.2, High Quality Audio Capacitors and Audio Noise Guard, mATX form factor or higher □RAM: 16GB DDR4 3200 MHz CL16, Intel® XMP-ready and XMP Certified, Low-profile heat spreader design or higher □SSD: 512 GB M.2 2280 Form Factor PCle Gen3x4 Interface, read up to :1700 MB, write up: 1550 MB/s or higher	unit	2	49,000.00	98,000.00



		1 1	-		
	Standard: PCI Express 4.0				
	■OpenGL: OpenGL®4.6, Video Memory: 8GB GDDR6				
	■PSU:550w, True Rated Power Supply 80 plus Bronze Rated				
	PSU for Micro ATX and ATX casing or higher				
16	Desktop Computer, Assembled, 12th Gen Core i5 or higher, SDD and HDD	set	1	49,000.00	49,000.00
	■Processor: Intel® Core i5 12th gen with Intel® UHD				
	Graphics 730 or higher				
	■Motherboard :Intel® H610 Chipset for 12th Gen Intel® Core™ Series Processors, Dual Channel Non-ECC				
	Unbuffered DDR4, 2 DIMMs, 6+1+1 Hybrid Digital VRM				
	Design, Intel® GbE LAN, NVMe PCIe 3.0 x4 M.2, High Quality				
	Audio Capacitors and Audio Noise Guard, mATX form factor or				
	higher				
	■RAM: 16GB DDR4 3200 Mhz or higher				
	■SSD: 512 GB NVMe PCIe Gen 3x4				
	⊚ HDD: 1 TB 7200 RPM				
	■PSU: 650w 80 plus Bronze Certified				
	■Casing: mATX Casing with transparent acrylic side panel				
	■24" IPS monitor 72% NSTC color gamut with 75Hz refresh				
	rate				
	■Keyboard and Mouse Combo: Spill-resistant design with up				
	to Up to 5 million keystrokes (excludes number lock key)				
	keyboard and full-sized ambidextrous optical mouse				
	©Operating system: Genuine Windows 11				
17	Desktop Computer, with Monitor, Core i5 12th Gen, 8GB RAM or higher	set	1	49,000.00	49,000.00
	■Processor: 12th Generation Intel® Core™ i5-12400 Processor(2.50 GHz up tp 4.40 GHz) or higher				
	Motherboard: Intel® H610 Express Chipset Micro ATX				
	Motherboard, with 6+1+1 Hybrid Digital VRM, High quality				
	capacitors and Anti-sulfur resistors or higher				
	■Operating System: Genuine Windows 11 Home 64				
	Memory: 8 GB DDR4-3200MHz (UDIMM) or higher				
	■Graphics: Integrated Graphics				
	■SSD: 256 GB SSD M.2 2280 PCle or higher				
	■Casing: mATX casing				
	■Power supply: at least 450W, True Rated 80+ Bronze				
	■Monitor: 24" FHD (1920 x 1080) IPS Monitor, NTSC 72%,				
	5ms response time, 60Hz				
18	Digital Voice Recorder	unit	3	7,500.00	22,500.00
	Built-in USB Black				
	Micro card slot				
	Stereo mic-in jack				
	Stereo earphone jack				
19	DJ Controller	set	1	25,000.00	25,000.00
	■4-deck layering DJ controller				
	⊚ (6) Fun, quick-launch effects with dual paddle triggers				
	■Large 6-inch, high-resolution capacitive-touch jog wheels with color displays				
	■Dedicated instant loop control with multiplier buttons				



	TILL 2 hand TO and filter knobs to are at a cudic access				
	■Full 3-band EQ and filter knobs to create audio sweeps ■(8) Performance pads per deck to access cues, loops, fader				
	cuts and samples				
	■24-bit audio output				
	■Microphone input, RCA output and headphone output				
20	Epson 001 ink, Black, 127ml, Genuine	htl	10	600.00	6 000 00
		btl			6,000.00
21	Epson 001 ink, Cyan, Genuine	btl	10	350.00	3,500.00
22	Epson 001 ink, Magenta, Genuine	btl	6	350.00	2,100.00
23	Epson 001 ink, Yellow, Genuine	btl	10	350.00	3,500.00
24	Full layout wired Keyboard	рс	5	2,500.00	12,500.00
	Full layout (100%, at least 104 keys), USB 2.0 1000Hz, 19-keys-rollover anti-ghosting, 5-zone RGB lighting.				
25	Hard Drive, External, 2TB, USB 3.0, 5.0 Gbit/s Transfer Rate or Better	unit	1	3,500.00	3,500.00
26	HDMI Cable, 10m	рс	1	1,000.00	1,000.00
20	■10 meters	pc	•	1,000.00	1,000.00
	■Nylon braided				
	,				
	■1.4 version 3D support ■Support all high resolutions including 480p, 720p, 1080p and				
	1180p.				
	■Multi -channel digital audio with a 10.2 Gbps band-width				
	■HDMI AV cable for HDTV				
	■HDMI EMI/RFI Compliant Cable				
	■24k GOLD plated HDMI plugs				
	■ROHS compliant cable.				
27	HDMI to HDMI Cable 3 meters	рс	20	600.00	12,000.00
				4 000 00	
28	HDMI to HDMI cable, 20 meters	рс	4	1,300.00	5,200.00
28	HDMI to HDMI cable, 20 meters Length: 20 Meters	рс	4	1,300.00	5,200.00
28	·	рс	4	1,300.00	5,200.00
28	Length: 20 Meters	рс	4	1,300.00	5,200.00
28	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male	рс	4	1,300.00	5,200.00
28	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps	pc	4	1,300.00	5,200.00
28	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable	рс	4	1,300.00	5,200.00
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding				
28	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade,	pc unit	2	1,300.00	2,000.00
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, © Type: Closed-back dynamic				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, Type: Closed-back dynamic Driver Diameter: 40 mm				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, Type: Closed-back dynamic Driver Diameter: 40 mm Frequency Response: 15 - 24,000 Hz				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, Type: Closed-back dynamic Driver Diameter: 40 mm Frequency Response: 15 - 24,000 Hz Maximum Input Power: 1,600 mW at 1 kHz				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, Type: Closed-back dynamic Driver Diameter: 40 mm Frequency Response: 15 - 24,000 Hz Maximum Input Power: 1,600 mW at 1 kHz Sensitivity: 98 dB				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, Type: Closed-back dynamic Driver Diameter: 40 mm Frequency Response: 15 - 24,000 Hz Maximum Input Power: 1,600 mW at 1 kHz Sensitivity: 98 dB Impedance: 35 ohms				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, Type: Closed-back dynamic Driver Diameter: 40 mm Frequency Response: 15 - 24,000 Hz Maximum Input Power: 1,600 mW at 1 kHz Sensitivity: 98 dB Impedance: 35 ohms Cable Includes two interchangeable cables: detachable 1.2				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, ■Type: Closed-back dynamic ■Driver Diameter: 40 mm ■Frequency Response: 15 - 24,000 Hz ■Maximum Input Power: 1,600 mW at 1 kHz ■Sensitivity: 98 dB ■Impedance: 35 ohms ■Cable Includes two interchangeable cables: detachable 1.2 m - 3.0 m (3.9' - 9.8') coiled cable and detachable 3.0 m (9.8')				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, ■Type: Closed-back dynamic ■Driver Diameter: 40 mm ■Frequency Response: 15 - 24,000 Hz ■Maximum Input Power: 1,600 mW at 1 kHz ■Sensitivity: 98 dB ■Impedance: 35 ohms ■Cable Includes two interchangeable cables: detachable 1.2 m - 3.0 m (3.9' - 9.8') coiled cable and detachable 3.0 m (9.8') straight cable				
	High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, ■Type: Closed-back dynamic ■Driver Diameter: 40 mm ■Frequency Response: 15 - 24,000 Hz ■Maximum Input Power: 1,600 mW at 1 kHz ■Sensitivity: 98 dB ■Impedance: 35 ohms ■Cable Includes two interchangeable cables: detachable 1.2 m - 3.0 m (3.9' - 9.8') coiled cable and detachable 3.0 m (9.8') straight cable ■Cable - Detachable: Yes				,
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, ■Type: Closed-back dynamic ■Driver Diameter: 40 mm ■Frequency Response: 15 - 24,000 Hz ■Maximum Input Power: 1,600 mW at 1 kHz ■Sensitivity: 98 dB ■Impedance: 35 ohms ■Cable Includes two interchangeable cables: detachable 1.2 m - 3.0 m (3.9' - 9.8') coiled cable and detachable 3.0 m (9.8') straight cable ■Cable - Detachable: Yes ■Magnet: Neodymium				
	High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, ■Type: Closed-back dynamic ■Driver Diameter: 40 mm ■Frequency Response: 15 - 24,000 Hz ■Maximum Input Power: 1,600 mW at 1 kHz ■Sensitivity: 98 dB ■Impedance: 35 ohms ■Cable Includes two interchangeable cables: detachable 1.2 m - 3.0 m (3.9' - 9.8') coiled cable and detachable 3.0 m (9.8') straight cable ■Cable - Detachable: Yes ■Magnet: Neodymium ■Voice Coil: CCAW (Copper-clad aluminum wire)				
	Length: 20 Meters High Quality Pure Copper HDMI Male to HDMI Male Transfers at speeds up to 10.2 Gbps Gold plated 19 pin HDMI connectors; oxygen-free copper cable PVC jacket with high visibility nylon braiding Headphone, Professional, Studio Grade, ■Type: Closed-back dynamic ■Driver Diameter: 40 mm ■Frequency Response: 15 - 24,000 Hz ■Maximum Input Power: 1,600 mW at 1 kHz ■Sensitivity: 98 dB ■Impedance: 35 ohms ■Cable Includes two interchangeable cables: detachable 1.2 m - 3.0 m (3.9' - 9.8') coiled cable and detachable 3.0 m (9.8') straight cable ■Cable - Detachable: Yes ■Magnet: Neodymium				



30	Ink, Epson 003,Genuine Black 65mL	btl	21	350.00	7,350.00
31	Ink, EPSON 003,Genuine Cyan 65mL	btl	15	350.00	5,250.00
32	Ink, EPSON 003,Genuine Magenta 65mL	btl	15	350.00	5,250.00
33	Ink, EPSON 003,Genuine Yellow 65mL	btl	15	350.00	5,250.00
34	Ink, Epson, genuine (C) T664, 70 ml	рс	6	350.00	2,100.00
35	Ink, Epson, genuine (M) T664, 70 ml	рс	7	350.00	2,450.00
36	Ink, Epson, genuine, (BK) T664, 70 ml	рс	9	350.00	3,150.00
37	Ink, Epson, genuine, (Y) T664, 70 ml	рс	6	350.00	2,100.00
38	Keyboard And Mouse Combo Bundle, USB powered	set	2	800.00	1,600.00
	⊚ Keyboard				
	■Keycaps: A-Shape, Round Edge				
	→ Hotkeys: No				
	◆Character: Laser Engraving				
	■Adjustable Keyboard Legs: Yes				
	■Rating: 5 V / 30 mA				
	Mouse				
	■Report Rate: 125 Hz				
	■ Sensor: Optical				
	■Resolution: 1000 DPI				
	■ Rating: 5 V / 100 mA				
	■ Buttons No.: 3				
	■Ergonomic Design: Symmetric				
	Size: Middle / Big Hands				
39	Laptop 14" (i3)	unit	1	38,000.00	38,000.00
	■Processor : Intel Core i3-1005G1 Processor 4M Cache, up to 3.40 GHz or higher				
	■Operating System : Windows 10 Home				
	■Memory : 4GB Onboard memory, 1 x SO-DIMM socket , total up to 8 GB SDRAM or higher				
	■Display: 14.0" (16:9) LED-backlit HD (1366x768) 60Hz Anti- Glare Panel with 45% NTSC				
	■Graphics : Integrated Intel UHD Graphics				
	Storage : 512GB PCIe Gen3 x2 SSD or higher				
	■Networking : Integrated Wi-Fi 5 (802.11 ac) Bluetooth 5.0 ■ Networking : Integrated Wi-Fi 5 (802.11 ac) Bluetooth 5.0				
	Battery: 2 -Cell 32 Wh lithium-polymer battery				
	with bag(backpack)				
40	Laptop, 12th Gen i5, 8GB RAM	unit	1	55,000.00	55,000.00
	Processor: 12th Generation Intel® Core™ i5-12450H Processor (E-cores up to 3.30 GHz P-cores up to 4.40 GHz) or higher				
	Operating System: Windows 11 Home 64 Single Language				
	Graphic Card: Integrated Graphics				
	Memory: 8 GB LPDDR5-4800MHz or higher				
	Storage: 512 GB SSD M.2 2242 PCIe Gen4 TLC or higher				
	Display: 14" WUXGA (1920 x 1200), IPS, Anti-Glare, Non- Touch, 45%NTSC, 300 nits, Narrow Bezel				
	Camera: 1080P FHD with Dual Microphone				
	Camera. 10001 1 11D with Dual witcophone				
	Battery: 3 Cell Li-Polymer 56.6Wh				



	Adapter - US				
	Fingerprint Reader: No Fingerprint Reader				
	with bag(backpack)				
41	LCD Projector (XGA), 3LCD Technology	unit	9	28,000.00	252,000.00
	Projection System Technology: RGB liquid crystal shutter				
	projection system (3LCD), 3-chip technology				
	White Light Output (Normal/Eco):3,600 lm				
	■Colour Light Output:3,600 lm ■ Colour Light Output: 3,600 lm				
	■Resolution XGA, at least 1024 x 768,				
	■Analog Input:D-Sub 15pin: 1				
	■Digital Input:HDMI: 1				
	■LCD:Native Resolution: XGA (1024 x 768)				
	■Size: 0.55" (C2fine)				
	■Lightsource:Type: 210W UHE				
	■Life (Normal / Eco): 6,000 / 12,000 hours				
	Aspect Ratio:4:3				
	■USB Interface:USB Type B: 1 (For Firmware Update, Copy				
	OSD Settings)				
	■Analog Input:D-Sub 15pin: 1				
	■Digital Input:HDMI: 1				
42	LCD Projector SVGA	lot	1	75,000.00	75,000.00
	3 units of LCD Projector				
	Projection System: 3LCD Technology, RGB liquid crystal shutter				
	■Resolution: SVGA (800x600), 4:3				
	■Light Output: 3,300 Lumen- 2,050 Lumen (economy)				
	■Contrast Ratio: 15,000:1				
	■Lamp: 210 W				
	■Lamp Hours: 6,000-10,000				
	With projector screen each				
43	LCD Projector, 3LCD Technology	unit	2	28,000.00	56,000.00
	Projection System Technology: RGB liquid crystal shutter				
	projection system (3LCD), 3-chip technology				
	White Light Output (Normal/Eco):3,600 lm				
	Colour Light Output:3,600 lm				
	Resolution XGA, at least 1024 x 768,				
	Analog Input: D-Sub 15pin: 1				
	Digital Input: HDMI: 1				
	LCD: Native Resolution: XGA (1024 x 768)				
	Size: 0.55" (C2fine)				
	Light source: Type: 210W UHE				
	Life (Normal / Eco): 6,000 / 12,000 hours				
	Aspect Ratio:4:3				
	USB Interface: USB Type B: 1 (For Firmware Update, Copy OSD Settings)				
	Analog Input: D-Sub 15pin: 1				
	Digital Input: HDMI: 1				
44	LCD Projector, XGA (1024x768)	unit	4	27,000.00	108,000.00
	■Projection Method: Front/rear/ceiling mount				



				 	
	■Pixel Number: at least 786,432 dots (1024 x 768) x 3				
	■Color Brightness: 3.600 lumen- 2.235 lumen (economy) In				
	accordance with IDMS15.4				
	Aspect ratio: 4:3				
	■Lamp Life: ECO Mode up to 5000 hrs				
	■Normal Mode up to 4000 hrs				
	■Projection Distance Wide/Tele: 1,8 m - 2,17 m (60 inch				
	screen)				
	■Keystone Correction: Manual				
	■USB Plug 'n Play: Compatible w/ PC and MAC computers				
	■Contrast Ratio: 15.000 : 1				
	■Color Reproduction: 16.77 million color				
45	Multi-Function Business Inkjet Color Printer	unit	1	17,000.00	17,000.00
	Specs:				
	Print, Scan Copy, Fax				
	Inkjet Printer				
	530 mm x 398 x 304 mm				
	Up to 22 (monochrome) /20 (color) ipm (Based on ISO/IEC				
	24734*)				
	Up to 35 (monochrome) / 27 (color) ppm (Based on Fast Mode)				
46	Presentation Clicker/Pointer	рс	1	2,200.00	2,200.00
	R400 2.4 GHz USB-Receiver Red Laser Pointer Wireless	P			_,
	Presentation Remote				
47	Printer, Tank Ink System, 3 in 1 (Print, Scan, Copy)	unit	1	11,000.00	11,000.00
	■Tank Ink System			·	<u> </u>
	■Printer Type: Print, Scan and Copy				
	Scanner Type: Flatbed colour image scanner				
	Sensor Type: CIS				
	■Optical Resolution: 600 x 1200 dpi				
	©Copy Speed: Maximum Copies from Standalone: 20 copies				
	Maximum Copy Size: A4, Letter Maximum Copy Size: A4, Letter				
	■ISO 29183, A4 Simplex Flatbed (Black / Colour): Up to 7.0				
	ipm / 1.7 ipm				
	■Max Copy Resolution: 300 x 300 dpi				
	■Paper Handling: Up to 20 Sheets-Premium Glossy Photo				
	Paper 10 Sheets-Envelope, 30 Sheets-Postcard				
	■Output Capacity: Up to 30 sheets				
	■A4 plain paper: 20 sheets, Premium Glossy Photo Paper				
	■Maximum Paper Size: 215.9 x 1200 mm (8.5 x 47.24")				
	■Nozzle Configuration: 180 x 1 nozzles Black, 59 x 1 nozzles				
	per colour (Cyan, Magenta, Yellow)				
	■Print Direction: Bi-directional printing				
	■Maximum Print Resolution: 5760 x 1440 dpi (with Variable-				
	Sized Droplet Technology)5760 x 1440 dpi (with Variable-				
	Sized Droplet Technology)				
	■Minimum Ink Droplet Size: 3 pl				
48	Printer, Wi-Fi Duplex All-in-One Ink	рс	1	18,000.00	18,000.00
	Printer Type:Print, Scan, Copy				<u> </u>
		1			
	Print Method:On-demand inkjet (piezoelectric)				



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1000VA / 600 Watts, Line interactive with AVR, 4 outlets 57 UPS unit 1 7,000.00 © Output Power Capacity: 550 Watts/1100 VA © Max Configurable Power: 550 Watts/1100 VA 2 years' warranty © Nominal Output Voltage: 230V © Output Connections:(2) IEC 320 C13 (Battery Backup) (4) Universal Receptacle (Battery Backup) © Nominal Input Voltage: 230V © At most 4 hours charging time	
■Output Power Capacity: 550 Watts/1100 VA ■Max Configurable Power: 550 Watts/1100 VA 2 years' warranty ■Nominal Output Voltage: 230V ■Output Connections:(2) IEC 320 C13 (Battery Backup) (4) Universal Receptacle (Battery Backup) ■Nominal Input Voltage: 230V ■At most 4 hours charging time	
 ■Max Configurable Power: 550 Watts/1100 VA 2 years' warranty ■Nominal Output Voltage: 230V ■Output Connections:(2) IEC 320 C13 (Battery Backup) (4) Universal Receptacle (Battery Backup) ■Nominal Input Voltage: 230V ■At most 4 hours charging time 	6,000.00
warranty Nominal Output Voltage: 230V Output Connections:(2) IEC 320 C13 (Battery Backup) (4) Universal Receptacle (Battery Backup) Nominal Input Voltage: 230V At most 4 hours charging time	6,000.00
 Nominal Output Voltage: 230V Output Connections:(2) IEC 320 C13 (Battery Backup) (4) Universal Receptacle (Battery Backup) Nominal Input Voltage: 230V At most 4 hours charging time 	6,000.00
■Output Connections:(2) IEC 320 C13 (Battery Backup) (4) Universal Receptacle (Battery Backup) ■Nominal Input Voltage: 230V ■At most 4 hours charging time	6,000.00
Universal Receptacle (Battery Backup) Nominal Input Voltage: 230V At most 4 hours charging time	6,000.00
■Nominal Input Voltage: 230V ■At most 4 hours charging time	6,000.00
■At most 4 hours charging time	6,000.00
	6,000.00
58 UPS 650VA-360W Uninterruptible Power Supply unit 2 3,000.00	<u> </u>
Quick Specs: 4 outlets (4 NEMA 5-15R), 650VA/360W, AVR	1
Technology, Surge Protection, Easy to use	
Output Capacity: 650VA/360W	
Output (on battery): 230V +/- 10%, 50/60Hz +/- 1Hz	
Input Voltage Range: 140V-300V, 50/60Hz +/- 5Hz (auto sensing)	
Surge: 156 J	
Battery recharge time: 8 hours	
No. of Outlets: 4 NEMA 5-15R Battery Backup Outlets	
Dimension: 14.2 cm x 10.1 cm x 30 cm	
Battery Type: Lead-Acid	
59 UPS Battery Backup, 1500VA unit 1 10,000.00	10,000.00
■ Capacity: at least 1500VA/900w	
Output voltage: 220	
Output frequency: 57-63 Hz for 60 Hz (or 50/60 Hz ± 3 Hz Sync to mains)	
Input: 200 – 240 V, 50/60 HZ, 16.0 A maximum	_
Input frequency: 50/60 Hz +/- 3 Hz Auto-sensing	
■6 battery backup sockets	
■USB, coax, phone/network, and serial ports	_
■ with Automatic Voltage Regulation (AVR)	_
DLCD screen	_
■at most 4 hours charging time	_
60 UPS with Built-in AVR lot 1 85,000.00	85,000.00
4 units of UPS with built-in AVR	33,3333
Description:	
-CPU controlled	
-Advanced AVR technology	
-Surge protection	
-Battery backup	†
-Auto charge in power off mode	
-Overload and short circuit protection	
-Resettable Fuse on back panel	
-LCD display and Audible alarm	
-3000VA	
-4 Outlets	
-Up to 120 Minutes Runtime	



	-AVR				
	Specifications:				
	Input:				
	Voltage: 220V				
	Voltage Range: 175-275V				
	Frequency: 50Hz/60Hz				
	Output:				
	Capacity (Total): 3000VA/1800W				
	Voltage (On Battery): 220V+-5%				
	Frequency: 50Hz/60Hz Sync with Utility Power				
	Transfer Time: 2-6ms Typical				
	Wave Form: Simulated Sine Wave				
	Connection: Universal Outlet x4				
	Battery:				
	Type: Maintenance-Free Sealed Lead-Acid				
	Capacity: 12v/9AHx4				
	Recharging Time: 8Hours > 90%				
	Back up Time (1PC): Up to 120 minutes (Depending on Load)				
61	UPS, 1000 VA	unit	2	4,000.00	8,000.00
	■1000VA/600W capacity				-
	■Frequency Range: 60 Hz				
	■Freq. Range (Batt. Mode): 60 Hz ± 1 Hz				
	■Transfer Time: Typical 4-8 ms				
	■Waveform (Batt. Mode): Simulated Sine Wave				
	■Back-up Runtime: 10-15 mins				
	■Voltage: 220 VAC				
	■Voltage Range: 162-270 VAC				
62	VOIP Phone	unit	1	20,000.00	20,000.00
	Audio Features				·
	HD voice: HD handset, HD speaker				
	Smart Noise Filtering				
	Narrowband codec: PCMU (G.711A), PCMA				
	(G.711μ), G.723.1, G.729, G.729A, G.729B,				
	G.729AB, G.726, iLBC				
	DTMF: In-band, Out-of-band (RFC 2833) and SIP INFO				
	• Full-duplex hands-free speakerphone with AEC				
	• VAD, CNG, AEC, PLC, AJB, AGC				
	Phone Features				
	• 2 VoIP accounts				
	Call hold, mute, DND				
	One-touch speed dial, hotline				
	Call forward, call waiting, call transfer				
	Group listening, SMS, emergency call				
	Redial, call return, auto answer				
-	Local 5-way conferencing				
	Direct IP call without SIP proxy				
	• Ring tone selection/import/delete				
	Set date time manually or automatically				
	- Oct date time manually of automatically				



	• Dial plan		
	XML Browser, action URL/URI		
	Integrated screenshots		
	• RTCP-XR, VQ-RTCPXR		
	Enhanced DSS Key		
	Directory		
	Loal phonebook up to 1000 entries		
	Black list		
	XML/LDAP remote phonebook		
	Smart dialing		
	Phonebook search/import/export		
	Call history: dialed/received/missed/forwarded		
	IP-PBX Features		
	Busy Lamp Field (BLF), Bridged Line Apperance (BLA)		
	Anonymous call, anonymous call rejection		
	Hot-desking, voice mail		
	Flexible seating		
	Call park, call pickup		
	Executive and Assistant		
	Centralized call recording		
	Visual voice mail		
	Call recording		
	Display and Indicator		
	• 2.3" 132x64-pixel graphical LCD with backlight		
	LED for call and message waiting indication		
	Dual-color (red or green) illuminated LEDs for		
	line status information		
	Intuitive user interface with icons and soft keys		
	Multilingual user interface		
	Caller ID with name and number		
	Power saving		
	Feature keys		
	• 2 line keys with LED		
	6 features keys: transfer, message, headset,		
	redial, mute, hands-free speakerphone		
	• 5 navigation keys		
	Volume control keys		
	Interface		
	Dual-port Gigabit Ethernet		
	Power over Ethernet (IEEE 802.3af), class 1*		
	• 1 x RJ9 (4P4C) handset port		
	• 1 x RJ9 (4P4C) headset port		
	Other Physical Features		
	Color: Classic Grey		
	Wall mountable		
	External Yealink AC adapter		
	AC 100-240 V input and DC 5 V/0.6 A output		
	• Power consumption (PSU): 2-3 W		
Щ			1



	Power consumption (PoE): 3-4 W				
	Dimension (W x D x H x T): 188 x 189 x 162 x 50 mm				
	Operating humidity: 10-95%				
	Operating temperature: -10 to +45°C (+14 to 113°F)				
	Storage temperature: -30 to +70°C (-22 to +158°F)				
	Management				
	Configuration: browser/phone/auto-provision				
	Auto provision via FTP/TFTP/HTTP/HTTPS for mass deploy				
	Auto-provision with PnP				
	• Zero-sp-touch, TR-069				
	Phone lock for personal privacy protection				
	Reset to factory, reboot				
	Package tracing export, system log				
	Network and Security				
	• SIP v1 (RFC2543), v2 (RFC3261)				
	Call server redundancy supported				
	NAT traversal: STUN mode				
	Proxy mode and peer-to-peer SIP link mode				
	IP assignment: static/DHCP				
	HTTP/HTTPS web server				
	Time and date synchronization using SNTP				
	UDP/TCP/DNS-SRV (RFC 3263)				
	QoS: 802.1p/Q tagging (VLAN), Layer 3 ToS DSCP				
	SRTP for voice				
	Transport Layer Security (TLS 1.3)				
	HTTPS certificate manager				
	AES encryption for configuration file (AES256)				
	Digest authentication				
	OpenVPN, IEEE802.1X, L2TP VPN				
	• IPv6				
	• LLDP/CDP/DHCP VLAN				
	• ICE				
	• WPA2/WPA3				
	Secure boot				
	GARP (Generic Attribute Registration Protocol)				
	NOTE: Must be compatible with existing Yearstar S300 Server				
	for auto provisioning				
63	Wired Mouse	рс	5	2,500.00	12,500.00
	200-8000 DPI with DPI button, with 2 thumb buttons.				
64	Biometrics Machine	unit	50	12,000.00	600,000.00
	Face Recognition/Fingerprint Time Attendance Recorder				
	High-Speed Identification Less than 1 second				
	TCP/IP Port for Internet Connection				
	Access Port Available to control one lock and exit button				
	Easy to install and user friendly				40 -0
65	Voice Recorder	рс	3	5,500.00	16,500.00
	Built-in, Direct USB connection for quick file transfer to PC				
	Expand memory with the micro SD card slot Up to 55 hours of				



	hottory life for extended recording Adjustable microphone				
	battery life for extended recording Adjustable microphone				
	range for clearer voices Auto voice recording reduces				
	background noise				
	size AAA alkaline batteries (2)				
	Just plug straight into a free USB port for an immediate connection—no USB cable needed.				
66		:4	4	420,000,00	420 000 00
66	Laptop, Intel Core i7-13700H, OS: Windows 11 Pro or higher	unit	1	120,000.00	120,000.00
	CPU: Intel Core i7-13700H OS: Windows 11 Pro (licensed) or				
	higher DAM: 16CD (2x 9CD), DDDE 1900MHz or higher				
	RAM: 16GB (2x 8GB), DDR5, 4800MHz or higher				
	Storage: 1TB M.2 PCie NVMe SSD or higher				
	GPU: NVIDIA GeForce RTX 4050, 6GB, GDDR6 Display:				
	15.6" FHD+ (1920 x 1080), Non-Touch, Anti-Glare, 500units, Infinity Edge or higher				
	Ports: 1 USB 3.2 Gen 2 Type-C port with DisplayPort, 2				
	Thunderbolt 4 (USB Type-C 3.2 Gen 2) Ports, 1 Headset				
	(Headphone and microphone combo) Port, 1USB-C to USB-A				
	v3.0 & HDMI V2.0 adapter (include in the box)				
	Slots: 1 SD Card slot, 1 Wedge-shape lock slot Camera: 720p				
	at 30 fps, HD camera & dual-array microphones				
	Battery: 6 Cell, 86Wh, Integrated Power: 130W type-C Adapter				
	MS Office: MS Office 2021 Professional				
	One year warranty on parts and services. Local authorized				
	service provider should be available and identified/provided for				
	in the BID offer.				
	Freebies: Laptop Bag				
	Rebidding - VSU-GOODS-23-46				
67	Android Smartphone	unit	1	10,000.00	10,000.00
67	Android Smartphone Specification:	unit	1	10,000.00	10,000.00
67	Specification:	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm)	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP	unit	1	10,000.00	10,000.00
67	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels	unit	1	10,000.00	10,000.00
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by)				
68	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens	unit	1	132,000.00	132,000.00
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by)				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification:				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount Image Sensor Aspect Ratio: 3:2				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount Image Sensor Aspect Ratio: 3:2 Number Of Pixels (Effective): Approx. 24.2 megapixels				
	■ Specification: — Chipset: Mediatek Helio G80 (12 nm) — Operating system: Android 10 or latest — ROM: at least 32 GB — RAM: at least 3GB — Screen Type: IPS LCD, at least 400 nits — Camera Front: at least 8 MP — Primary(Back) Camera Resolution at least 13MP — Resolution: at least 1080 x 2340 pixels — SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount Image Sensor Aspect Ratio: 3:2 Number of Pixels (Effective): Approx. 24.2 megapixels Number of Pixels (total): Approx. 25.3 megapixels				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount Image Sensor Aspect Ratio: 3:2 Number of Pixels (Effective): Approx. 24.2 megapixels Number of Pixels (total): Approx. 25.3 megapixels Sensor Type: 35 mm full frame (35.6 x 23.8 mm), Exmor R				
	■ Specification: — Chipset: Mediatek Helio G80 (12 nm) — Operating system: Android 10 or latest — ROM: at least 32 GB — RAM: at least 3GB — Screen Type: IPS LCD, at least 400 nits — Camera Front: at least 8 MP — Primary(Back) Camera Resolution at least 13MP — Resolution: at least 1080 x 2340 pixels — SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount Image Sensor Aspect Ratio: 3:2 Number of Pixels (Effective): Approx. 24.2 megapixels Number of Pixels (total): Approx. 25.3 megapixels Sensor Type: 35 mm full frame (35.6 x 23.8 mm), Exmor R CMOS sensor				
	■Specification: —Chipset: Mediatek Helio G80 (12 nm) —Operating system: Android 10 or latest —ROM: at least 32 GB —RAM: at least 3GB —Screen Type: IPS LCD, at least 400 nits —Camera Front: at least 8 MP —Primary(Back) Camera Resolution at least 13MP —Resolution: at least 1080 x 2340 pixels —SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount Image Sensor Aspect Ratio: 3:2 Number of Pixels (Effective): Approx. 24.2 megapixels Number of Pixels (total): Approx. 25.3 megapixels Sensor Type: 35 mm full frame (35.6 x 23.8 mm), Exmor R				
	■ Specification: — Chipset: Mediatek Helio G80 (12 nm) — Operating system: Android 10 or latest — ROM: at least 32 GB — RAM: at least 3GB — Screen Type: IPS LCD, at least 400 nits — Camera Front: at least 8 MP — Primary(Back) Camera Resolution at least 13MP — Resolution: at least 1080 x 2340 pixels — SIM: Dual SIM (Nano-SIM, dual stand-by) Camera with 28-70 mm Zoom Lens Product Specification: Lens Lens Mount: E-mount Image Sensor Aspect Ratio: 3:2 Number of Pixels (Effective): Approx. 24.2 megapixels Number of Pixels (total): Approx. 25.3 megapixels Sensor Type: 35 mm full frame (35.6 x 23.8 mm), Exmor R CMOS sensor Anti-Dust System: Charge protection coating on optical filter				



Image Size (pixels) [16:9]: 35 mm full frame L: 6000 x 3376 (20 M), M: 3936 x 2216 (8.7 M), S: 3008 x 1688 (5.1 M), APS-			
C L: 3936 x 2216 (8.7 M), M: 3008 x 1688 (5.1 M), S: 1968 x 1112 (2.2 M)			
Image Size (pixels) [Sweep Panorama]			
Picture Effect: 8 types: Posterization (Color), Posterization			
(B/W), Pop Color, Retro Photo, Partial Color (R/G/B/Y), High			
Contrast Monochrome, Toy Camera			
(Normal/Cool/Warm/Green/Magenta), Soft High-key, Rich-			
tone Monochrome			
Creative Style: Standard, Vivid, Neutral, Clear, Deep, Light,			
Portrait, Landscape, Sunset, Night Scene, Autumn leaves,			
Black & White, Sepia, Style Box (1–6), (Contrast [-3 to +3			
steps], Saturation [-3 to +3 steps], Sharpness [-3 to +3 steps])			
Picture Profile: Yes (Off/PP1-PP10) Parameters: Black level, Gamma (Movie, Still, Cine1-4, ITU709, ITU709 [800%], S-			
Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color			
Mode, Saturation, Color Phase, Color Depth, Detail, Copy,			
Reset			
Dynamic Range Functions: Off, Dynamic Range Optimizer			
(Auto/Level (1-5)), Auto High Dynamic Range (Auto Exposure			
Difference, Exposure Difference Level (1-6 EV, 1.0 EV step))			
Color Space: sRGB standard (with sYCC gamut) and Adobe			
RGB standard, compatible with TRILUMINOS Color			
14bit RAW: Yes			
Uncompressed RAW: Yes			
Recording (movie)			
Recording Format: XAVC S, AVCHD format Ver. 2.0 compliant			
Color Space: xvYCC standard (x.v.Color when connected via HDMI cable) compatible with TRILUMINOS Color			
Picture Effect: Posterization (Color), Posterization (B/W), Pop			
Color, Retro Photo, Partial Color (R/G/B/Y), High Contrast			
Monochrome, Toy Camera			
(Normal/Cool/Warm/Green/Magenta), Soft High-key			
Creative Style: Standard, Vivid, Neutral, Clear, Deep, Light,			
Portrait, Landscape, Sunset, Night Scene, Autumn leaves,			
Black & White, Sepia, Style Box (1–6), (Contrast [-3 to +3			
steps], Saturation [-3 to +3 steps], Sharpness [-3 to +3 steps]) Picture Profile: Yes (Off/PP1-PP10) Parameters: Black level,	 	+	
Gamma (Movie, Still, Cine1-4, ITU709, ITU709 [800%], S-			
Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color			
Mode, Saturation, Color Phase, Color Depth, Detail, Copy,			
Reset			
Image Size (pixels), NTSC: XAVC S 4K: 3840 x 2160 (30p,			
100 M), 3840 x 2160 (24p, 100 M), 3840 x 2160 (30p, 60 M),			
3840 x 2160 (24p, 60 M), XAVC S HD: 1920 x 1080 (120p,			
100 M), 1920 x 1080 (120p, 60 M), 1920 x 1080 (60p, 50 M),			
1920 x 1080 (30p, 50 M), 1920 x 1080 (24p, 50 M), 1920 x			
1080 (60p, 25 M), 1920 x 1080 (30p, 16 M), AVCHD: 1920 x 1080 (60i, 24 M, FX), 1920 x 1080 (60i, 17 M, FH)			
Image Size (pixels), PAL: XAVC S 4K: 3840 x 2160 (25p, 100	 		
M), 3840 x 2160 (25p, 60 M), XAVC S HD: 1920 x 1080 (100p,			
100 M), 1920 x 1080 (100p, 60 M), 1920 x 1080 (50p, 50 M),			
1920 x 1080 (25p, 50 M), AVCHD: 1920 x 1080 (50i, 24 M,			
 •			



EV) 4000 4000 /EO: 47 M EU)			
FX), 1920 x 1080 (50i, 17 M, FH)			
Slow and quick motion (shooting frame rate) : NTSC mode:			
1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps, PAL mode:			
1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps			
Slow and quick motion (recording frame rate and image size):			
NTSC mode: 1920x1080 (60p, 30p, 24p), PAL mode:			
1920x1080 (50p, 25p)			
Movie Functions: Audio Level Display, Audio Rec Level, PAL/NTSC Selector, Yes (1280 x 720 (Approx.9 Mbps)),			
TC/UB (TC Preset/UB Preset/TC Format/TC Run/TC Make/UB			
Time Rec), Auto Slow Shutter, REC Control, Clean HDMI Info.			
(ON/OFF selectable), Gamma Disp. Assist			
Clean HDMI output: 3840 x 2160 (25p), 1920 x 1080 (50p),			
1920 x 1080 (50i), 1920 x 1080 (24p), 1920 x 1080 (60p),			
1920 x 1080 (60i), 3840 x 2160 (30p), 3840 x 2160 (24p),			
YCbCr 4:2:2 8-bit / RGB 8-bit			
Recording System			
Location information Link from smartphone: Yes			
Media: Memory Stick PRO Duo, Memory Stick PRO-HG Duo,			
Memory Stick Micro (M2), SD memory card, SDHC memory			
card (UHS-I/II compliant), SDXC memory card (UHS-I/II			
compliant), microSD memory card, microSDHC memory card,			
microSDXC memory card			
Memory Card Slot: SLOT1: Slot for SD (UHS-I/II compliant)			
memory card, SLOT2: Multi slot for Memory Stick Duo/SD			
(UHS-I compliant) memory card			
Recording mode on 2 memory cards: Simult. Rec (Still),			
Simult. Rec (Movie), Simult. Rec (Still/Movie), Sort			
(JPEG/RAW), Sort (Still/Movie), Auto Switch Media (On/Off),			
Сору			
Noise Reduction			
Noise Reduction: Long exposure NR: On/Off, available at			
shutter speeds longer than 1 sec., High ISO NR:			
Normal/Low/Off			
Multi Frame NR			
White balance			
White Balance Modes: Auto / Daylight / Shade / Cloudy /			
Incandescent / Fluorescent / Warm White / Cool White / Day			
White / Daylight / Flash / Underwater / Color Temperature			
2500 to 9900K and color filter G7 to M7 (57-step), A7 to B7			
(29-step) / Custom			
AWB Micro Adjustment: Yes G7 to M7, 57-step A7 to B7, 29-			
step		-	
Priority Set in AWB: Yes			
Bracketing: 3 frames, H/L selectable			
Focus			
Focus Type: Fast Hybrid AF (phase-detection AF/contrast-			
detection AF)2			
Focus Sensor: Exmor R® CMOS sensor			
Focus Point: 35 mm full frame: 693 points (phase-detection			
AF), APS-C mode with full frame lens: 299 points (phase-			
detection AF), with APS-C lens: 221 points (phase-detection			
AF) / 425 points (contrast-detection AF)			



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	Focus Sensitivity Range: EV-3 to EV20 (ISO100 equivalent with F2.0 lens attached)		
	Focus Mode: AF-A (Automatic AF), AF-S (Single-shot AF), AF-		
	C (Continuous AF), DMF (Direct Manual Focus), Manual		
	Focus		
	Focus Area: Wide (693 points (phase-detection AF), 425		
	points (contrast-detection AF)) / Zone / Center / Flexible Spot		
	(S/M/L) /Expanded Flexible Spot/ Lock-on AF (Wide / Zone /		
	Center / Flexible Spot (S/M/L)/Expanded Flexible Spot)		
	Other Features: Eye-start AF (only with LA-EA2 or LA-EA4		
	attached (sold separately)), Lock-on AF, Eye AF, AF micro		
	adjustment with LA-EA2 or LA-EA4 (sold separately), Predictive control, Focus lock, AF Track Sens, Swt.V/H AF		
	Area, AF Area Regist.		
	AF Illuminator: Yes (with built-in LED type)		
	AF Illuminator range: Approx. 0.3–3.0 m (with FE 28–70 mm		
	F3.5–5.6 OSS attached)		
	Focus type with LA-EA3 (Sold separately): selectable (phase-		
	detection, contrast-detection)		
	Exposure		
	Metering Type: 1200-zone evaluative metering		
	Viewfinder		
	Viewfinder Type: 1.3 cm (0.5 type) electronic viewfinder		
	(color), XGA OLED		
	Number of Dots: 2,359,296 dots		
	Brightness Control (Viewfinder): Auto/Manual (5 steps		
	between -2 and +2)		
	Color Temperature Control: Manual (5 steps)		
	Field Coverage: 100%		
	Magnification: approx. 0.78 x (with 50mm lens at infinity, -1m-		
	1)		
	Diopter Adjustment: -4.0 to +3.0 m-1		
	Eye Point: Approx. 23 mm from the eyepiece lens, 18.5 mm		
	from the eyepiece frame at -1 m-1 (CIPA standard)		
	Finder Frame Rate Selection		
	Display Contents: Graphic Display, Display All Info, No Display		
	Info, Digital Level Gauge, Histogram		
	LCD Screen		
	Monitor Type: 7.5 cm (3.0-type) type TFT		
	Number of Dots: 921,600 dots		
	Touch Panel: Yes		
	Brightness Control: Manual (5 steps between -2 and +2),		
	Sunny Weather mode Adjustable Angle: Up by approx. 107 degrees, Down by		
	approx. 41 degrees		
	Display Selector (Finder/LCD): Yes (Auto/Manual)		
	Real-time Image Adjustment Display (LCD): On/Off		
	Quick Navi: Yes		
	Focus Magnifier: Yes (35 mm full frame: 5.9x, 11.7x, APS-C:		
	3.8x, 7.7x)		
	Zebra: Yes (selectable level + range or lower limit as custom		
	setting)		
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Peaking MF: Yes (Level selting: High/Mid/Low/Off, Color: White/Red/Yellow) Others: Grid Line (Rule of 3rds Grid/Square Grid/Dlag. + Square Grid/Off), Movie Marker (Center/Aspect/Safety 2 Cane/Guideframe) Display Content: Graphic Display, Display All Info, No Disp, Info, Digital Level Gauge, Histogram, For viewfinder, Monitor Off Other Features PlayMemories Camera Apps** Clear Image Zoom: Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x, HDD Digital Zoom: Smart zoom (Still images): 35 mm full frame: M: approx 1.5x, S. approx 2x, APS-C: M: approx 1.5x, S: approx 2x, X, APS-C: M: approx 1.5x, S: approx 2x, X, APS-C: Desprox 4x, M: approx 5.2x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 4x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 4x, APS-C: Desprox 4x, M: approx 6.1x, S: approx 4x, APS-C: Desprox 4x, M: approx 6.1x, S: approx 4x, APS-C: Desprox 4x, APS			
Others: Grid Line (Rule of 3rds Grid/Square Grid/Diag.) Square Grid/Off), Movie Marker (Center/Aspect/Safety Zone/Guideframe) Display Content: Graphic Display, Display All Info, No Disp. Info, Digital Level Gauge, Histogram, For viewfinder, Monitor Off Other Features PlayMemories Camera Apps™ Clear Image Zoom: Still images: Approx. 2x, Movies: Approx. 1.5x (AK), Approx. 2x (HD) Digital Zoom: Simart zoom (Still images): 35 mm full frame: M: approx 1.5x, S. approx 2x, APS-C: M: approx 4x, M: approx 4x, M: approx 5.x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 4x, APS-C: approx 4x, M: approx 4x, APS-C: approx 4x, APS-C: approx 4x, M: approx 4x, APS-C: a			
Square Grid/Off), Movie Marker (Center/Aspect/Safety Zone/Guideframe) Display Content: Graphic Display, Display All Info, No Disp. Info, Digital Level Gauge, Histogram, For viewfinder, Monitor Off Other Features PlayMemories Camera Apps™ Clear Image Zoom: Still Images: Approx. 2x, Movies: Approx. 1.5x (AK), Approx. 2x (HD) Digital Zoom: Smart zoom (Still images): 35 mm full frame: M: approx 1.5x, S. approx 2x, APS-C: M: approx 1.5x, S: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx 6, f.y, S: approx 2x, APS-C: L: approx 4x, M: approx	/		
Display Content: Graphic Display, Display All Info, No Disp. Info, Digital Level Gauge, Histogram, For viewfinder, Monitor Off Other Features PlayMemories Camera Apps™ Clear Image Zoom: Still images: Approx. 2x, Movies: Approx. 1.sx (HA), Approx. 2x, (HD) Digital Zoom: Smart zoom (Still images): 35 mm full frame: M: approx 1.5x, S: approx 2x, APS-C: M: approx 1.5x, S: approx 2x, Digital zoom (Still images): 35 mm full frame: Imagerox 1.5x, S: approx 2x, APS-C: M: approx 4x, M: approx 4x, APS-C: approx 4x, M: approx 4x, APS-C: approx 4x, M: approx 5.2x, S: approx 8x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 8x, APS-C: Display Info (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x Face Detection: Modes: Face Priority in AF (On/Off), Face Priority in Multi Metering (On/Off), Regist Faces Priority (On/Off), Face registration, Max. number of detectable: 8 Self-Portrait Self-Timer Others: Touch Focus: Yes (Available with LCD monitor or Viewfinder operation), ISO AUTO Min. SS, Bright Monitoring, Set File Name, FTP Transfer Func., Help guide, Area Setting, Shop Front Mode, Video Light Mode, Zoom Ring Rotate Eye-Fi ready Shutter Type: Electronically-controlled, vertical-traverse, focal-plane type Shutter Type Shutter Type Shutter Type Shutter Tope Shutter Tope Shutter Robed: Still images: 1/8000 to 30 sec, Bulb, Movies: 1/8000 to 1/4 (1/3 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode) Flash Sync. Speed: 1/250 sec.3 Electronic Front Curtain Shutter: Yes (ON/OFF) Silent Shooting: Yes (ON/OFF) Image Salobilization Type: Image Sensor-Shift mechanism with 5-axis compensation (compensation depends on lens specifications) Compensation (compensation: 4/-3.0 EV (switchable between 1/3 and 1/2 EV steps)) Flash Bracketing: 3/59 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0 EV increments. Flash Modes: Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless4, Hi- speed sync.4	,		
Info, Digital Level Gauge, Histogram, For viewfinder, Monitor Off Other Features PlayMemories Camera Apps™ Clear Image Zoom: Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x (HD) Digital Zoom: Smart zoom (Still images): 35 mm full frame: M. approx 1.5x, S. approx 2x, APS-C: M. approx 1.3x, S. approx 2x, Digital zoom (Still images): 35 mm full frame: L. approx 4x, M. approx 6.1x, S. approx 8x, APS-C: L. approx 4x, M. approx 5.2x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 5.2x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Mapprox 6.1x, S. approx 6.1x,			
Info, Digital Level Gauge, Histogram, For viewfinder, Monitor Off Other Features PlayMemories Camera Apps™ Clear Image Zoom: Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x (HD) Digital Zoom: Smart zoom (Still images): 35 mm full frame: M. approx 1.5x, S. approx 2x, APS-C: M. approx 1.3x, S. approx 2x, Digital zoom (Still images): 35 mm full frame: L. approx 4x, M. approx 6.1x, S. approx 8x, APS-C: L. approx 4x, M. approx 5.2x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 5.2x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M. approx 6.1x, S. approx 8x, Mapprox 6.1x, S. approx 6.1x,	Display Content: Graphic Display, Display All Info, No Disp.		
Other Features PlayMemories Camera Apps™ Clear Image Zoom: Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x (HD) Digital Zoom: Smart zoom (Still images): 35 mm full frame: M. approx 15x, S. approx 2x, APS-C: M. approx 13x, S. approx 2x, Digital zoom (Still images): 35 mm full frame: L. approx 4x, M. approx 6.1x, S. approx 8x, APS-C: L: approx 4x, M. approx 6.1x, S. approx 8x, APS-C: L: approx 4x, M. approx 4x, APS-C: approx 8x, APS-C: L: approx 4x, Face Detection: Modes: Face Priority in AF (On/Off), Face Priority in Multi Metering (On/Off), Regist. Faces Priority (On/Off), Face registration, Max. number of detectable: 8 Self-Portrait Self-Timer Others: Touch Focus: Yes (Available with LCD monitor or Viewfinder operation), ISO AUTO Min. SS, Bright Monitoring, Set File Name, FTP Transfer Func., Help guide, Area Setting, Shop Front Mode, Video Light Mode, Zoom Ring Rotate Eye-Fi ready Shutter Type: Electronically-controlled, vertical-traverse, focal-plane type Shutter Type Shutter Type Shutter Speed: Still images: 1/8000 to 30 sec, Butb, Movies: 1/8000 to 1/4 (173 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode) Flash Sync. Speed: 1/250 sec. 3 Electronic Front Curtain Shutter: Yes (ON/OFF) Sillent Shooting: Yes (ON/OFF) Image Sabilization Type: Image Sabilization Type: Image Sabilization Type: Image Sabilization Type: Image Sabilization Flash Compensation Effect: 5.0 stops (based on CIPA standard. Pitchyaw shake only. With Planar T* FE 50mm F1.4 ZA lens mounted. Long exposure NR off.) Flash Control Control: Pre-flash TTL Flash Control Control: Pre-flash TIL Flash Compensation: +/-3.0 EV (switchable between 1/3 and 1/2 EV steps)\ Flash Bracketing: 3/59 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0 EV increments. Flash Modes: Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless4, Hi- speed sync. 4			
PlayMemories Camera Apps™ Clear Image Scoom: Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x, (HD) Digital Zoom: Smart zoom (Still images): 35 mm full frame: M: approx. 1.5x, S: approx. 2x, APS-C: M: approx. 4x, M: approx. 4x, M: approx. 6.1x, S: approx. 8x, APS-C: L: approx. 4x, M: approx. 6.1x, S: approx. 8x, APS-C: L: approx. 4x, M: approx. 6.1x, S: approx. 8x, Digital zoom (Movie): 35 mm full frame: approx. 4x, APS-C: approx. 4x Face Detection: Modes: Face Priority in AF (On/Off), Face Priority in Multi Metering (On/Off), Regist. Faces Priority (On/Off), Face registration, Max. number of detectable: 8 Self-Portrait Self-Timer Others: Touch Focus: Yes (Available with LCD monitor or Viewfinder operation), ISO AUTO Min. SS, Bright Monitoring, Set File Name, FTP Transfer Func., Help guide, Area Setting, Shop Front Mode, Video Light Mode, Zoom Ring Rotate Eye-Fi ready Shutter Type: Electronically-controlled, vertical-traverse, focal-plane type Shutter Type Shutter Type Shutter Type Shutter Speed: Still images: 1/8000 to 30 sec, Bulb, Movies: 1/8000 to 1/4 (1/3 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto Slow shutter mode) Flash Sync. Speed: 1/250 sec.3 Electronic Front Curtain Shutter: Yes (ON/OFF) Silent Shooting: Yes (ON/OFF) Image Stabilization Type: Image Sensor-Shift mechanism with 5-axis compensation (compensation depends on lens specifications) Compensation (compensation depends on lens specifications) Compensation (compensation depends on lens specifications) Compensation (compensation: +/-3.0 EV (switchable between 1/3 and 1/2 EV steps)) Flash Control Control: Pre-flash TTL Flash Compensation: -/-3.0 EV (switchable between 1/3 and 1/2 EV steps) Flash Modes: Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless4, Hi- speed sync. 4	Off		
Clear Image Zoom: Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x (1D) Digital Zoom: Smart zoom (Still images): 35 mm full frame: M: approx 1.5x, S: approx 2x, APS-C: M: approx 1.3x, S: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M: approx 6.1x, S: approx 4x, APS-C: approx 4x, M: approx 6x, APS-C: approx 4x, APS-C:	Other Features		
1.5x (4K), Approx. 2x (HD) Digital Zoom. Smart zoom (Still images): 35 mm full frame: M: approx 1.5x, S: approx 2x, APS-C: M: approx 1,5x, S: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 4x, APS-C: approx 4x Face Detection: Modes: Face Priority in AF (On/Off), Face Priority in Multi Metering (On/Off), Regist. Faces Priority (On/Off), Face registration, Max. number of detectable: 8 Self-Portrait Self-Timer Others: Touch Focus: Yes (Available with LCD monitor or Viewfinder operation), ISO AUTO Min. SS, Bright Monitoring, Set File Name, FTP Transfer Func., Help guide, Area Setting, Shop Front Mode, Video Light Mode, Zoom Ring Rotate Eye-Fi ready Shutter Type: Electronically-controlled, vertical-traverse, focal-plane type Shutter Type Shutter Type Shutter Speed: Still images: 1/8000 to 30 sec, Bulb, Movies: 1/8000 to 1/4 (1/3 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode) Flash Sync. Speed: 1/250 sec.3 Electronic Front Curtain Shutter: Yes (ON/OFF) Silent Shooting: Yes (ON/OFF) Image Stabilization Type: Image Sensor-Shift mechanism with 5-axis compensation (compensation depends on lens specifications) Compensation (compensation depends on lens specifications) Compensation (compensation Helpanar T' FE Somm F1.4 ZA lens mounted. Long exposure NR off.) Flash Control Control: Pre-flash TTL Flash Compensation: +/-3.0 EV (switchable between 1/3 and 1/2 EV steps)\ Flash Bracketing: 3/59 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0, 3.0 EV increments, in 1/3, 1/2, 3/3, 1.0, 2.0,	PlayMemories Camera Apps™		
Digital Zoom: Smart zoom (Still images): 35 mm full frame: M: approx 1.5x, S: approx 2x, APS-C: M: approx 1.3x, S: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 4x, S: approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M: approx 5.2x, S: approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 8x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 8x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 8x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 8x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 8x, APS-C: L: approx 4x, M: approx 5.2x, S: approx 5	Clear Image Zoom: Still images: Approx. 2x, Movies: Approx.		
approx 1.5x, S: approx 2x, APS-C: M: approx 4x, X, X, Digital zoom (Still images): 35 mm full frame: L: approx 4x, X, M: approx 6.1x, S: approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x, M: approx 5.2x, S: approx 8x, Digital zoom (Movie): 35 mm full frame: approx 4x, APS-C: approx 4x APS-C: approx			
2x, Digital zoom (Still images): 35 mm full frame: L: approx 4x, M: approx 6.1x, S: approx 8x, APS-C: L: approx 4x, M: approx 4x, APS-C: approx 4x Face Detection: Modes: Face Priority in AF (On/Off), Face Priority in Multi Metering (On/Off), Regist. Faces Priority (On/Off), Face registration, Max. number of detectable: 8 Self-Portrail Self-Timer Others: Touch Focus: Yes (Available with LCD monitor or Viewfinder operation), ISO AUTO Min. SS, Bright Monitoring, Set File Name, FTP Transfer Func., Help guide, Area Setting, Shop Front Mode, Video Light Mode, Zoom Ring Rotate Eye-Fi ready Shutter Type: Electronically-controlled, vertical-traverse, focal-plane type Shutter Speed: Still images: 1/8000 to 30 sec, Bulb, Movies: 1/8000 to 1/4 (1/3 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode) Flash Symc. Speed: 1/250 sec. 3 Electronic Front Curtain Shutter: Yes (ON/OFF) Silent Shooting: Yes (ON/OFF) Image Stabilization Type: Image Sensor-Shift mechanism with 5-axis compensation Effect: 5.0 stops (based on CIPA standard. Pitch/yaw shake only. With Planar T* FE 50mm F1.4 ZA lens mounted. Long exposure NR off.) Flash Control Control: Pre-flash TTL Flash Compensation: +/-3.0 EV (switchable between 1/3 and 1/2 EV steps)\ Flash Bracketing: 3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0 EV increments. Flash Modes: Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless4, Hispeed sync. 4			
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mounted. Long exposure NR off.) Flash Control Control: Pre-flash TTL Flash Compensation: +/-3.0 EV (switchable between 1/3 and 1/2 EV steps)\ Flash Bracketing: 3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3, 1.0 EV increments. Flash Modes: Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless4, Hispeed sync.4	Compensation Effect: 5.0 stops (based on CIPA standard.		
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Sync., Red-eye reduction (on/off selectable), Wireless4, Hi- speed sync.4			
speed sync.4			
External Flash Compatibility: Sony α System Flash compatible		1	
	External Flash Compatibility: Sony α System Flash compatible		



with Multi Interface Shoe, attach the shoe adapter for flash compatible with Auto-lock accessory shoe FE Level Lock: Yes	
FE Level Lock: Yes	
1 = =0.0. =0.0	
Wireless Control: Yes (Light signal: Available with Fill-flash,	
Slow Sync., Hi-speed sync. /Radio signal: Available with Fill-	
flash, Rear Sync., Slow Sync., Hi-speed sync.)	
Drive	
Drive Modes: Single Shooting, Continuous shooting	
(Hi+/Hi/Mid/Lo selectable), Self-timer, Self-timer (Cont.),	
Bracket: Single, Bracket: Cont., White Balance bracket, DRO	
bracket	
Continuous Drive Speed (approx. max.): Continuous shooting:	
Hi+: max. 10 fps, Hi: max. 8 fps, Mid: max. 6fps, Lo: max. 3 fps	
No. of recordable frames (approx.): JPEG Extra fine L: 163	
frames, JPEG Fine L: 172 frames, JPEG Standard L: approx.	
177 frames, RAW: 89 frames, RAW & JPG: 79 frames, RAW	
(Uncompressed): 40 frames, RAW (Uncompressed) & JPG: 36	
frames 5	
Self-Timer: 10 sec. delay/5 sec. delay/2 sec. delay/Continuous	
self-timer (3 frames after 10 sec. delay/5 frames after 10 sec.	
delay/3 frames after 5 sec. delay/5 frames after 5 sec. delay/3	
frames after 2 sec. delay/5 frames after 2 sec.	
delay)/Bracketing self-timer	
Playback	
Photo Capture: Yes	
Modes: Single (with or without shooting information Y RGB	
histogram & highlight/shadow warning), 9/25-frame index view,	
Enlarged display mode (L: 18.8x, M: 12.3x, S: 9.4x), Auto	
Review (10/5/2 sec, Off), Image orientation (Auto/Manual/Off	
selectable), Slideshow, Folder selection (Date/ Still/	
AVCHD/XAVC S HD/XAVC S 4K), Forward/Rewind (movie),	
Delete, Protect, Rating, Disp Cont Shoot Grp	
Interface	
PC Interface: Mass-storage, MTP, PC remote	
Multi/micro USB terminal: Yes	
USB Type-C® Terminal: Yes (SuperSpeed USB (USB 3.1 Gen	
1) compatible)	
NFC: Yes (NFC forum Type 3 Tag compatible), One-touch	
remote, One-touch sharing	
Wireless LAN (Built-In): Wi-Fi Compatible, IEEE 802.11b/g/n	
(2.4 GHz band), View on Smartphone, Remote control via	
Smartphone, Send to Computer, View on TV	
HD Output: HDMI micro connector (Type-D), BRAVIA Sync	
(Control for HDMI), PhotoTV HD, 4K movie output/4K still	
image PB	
Bluetooth®: Yes (Bluetooth Standard Ver. 4.1 (2.4 GHz band))	
Auto-lock Accessory Shoe	
Multi Interface Shoe: Yes	
Smart Accessory Terminal 2	
Mic Terminal: Yes (3.5 mm Stereo minijack)	
DC IN Terminal	
Sync Terminal	



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	Headphone Terminal: Yes (3.5 mm Stereo minijack)				
	Vertical Grip Connector: Yes				
	PC Remote: Yes				
	LAN Terminal				
	Print				
	Compatible Standards: Exif Print, Print Image Matching III,				
	DPOF setting				
	Custom function				
	Type: Custom key settings, Programmable Setting (Body 2				
	sets /memory card 4 sets), My Menu, Reg Cust Shoot Set				
	Lens Compensation				
	Setting: Peripheral Shading, Chromatic Aberration, Distortion				
	Power				
	Supplied Battery: One rechargeable battery pack NP-FZ100				
	Battery Life (Still Images): Approx. 610 shots (Viewfinder) / approx. 710 shots (LCD monitor) (CIPA standard)8				
	Battery Life (Movie, actual recording): Approx. 115 min				
	(Viewfinder) / Approx. 125 min (LCD monitor) (CIPA				
	standard)910				
	Battery Life (Movie, continuous recording): Approx. 200 min				
	(Viewfinder) / Approx. 210 min (LCD monitor) (CIPA				
	standard)911				
	Internal Battery Charge: Yes (Available with Multi/Micro USB				
	Terminal or USB Type-C Terminal)				
	Power consumption with Viewfinder: Still images: approx. 3.2				
	W (with FE 28-70 mm F3.5-5.6 OSS lens attached), Movies:				
	approx. 4.9 W (with FE 28-70 mm F3.5-5.6 OSS lens				
	attached)				
	Power consumption with LCD screen: Still images: approx. 2.8				
	W (with FE 28-70 mm F3.5-5.6 OSS lens attached), Movies: approx. 4.7 W (with FE 28-70 mm F3.5-5.6 OSS lens				
	attached)				
	USB Power Supply: Yes (Available with Multi/Micro USB				
	Terminal or USB Type-C Terminal)				
	Size & Weight				
	Weight (with battery and memory card included): Approx. 650				
	g (1 lb 7.0 oz)				
	Dimensions (W x H x D): Approx. 126.9 mm x 95.6 mm x 73.7				
	mm, Approx. 126.9 mm x 95.6 mm x 62.7 mm (from grip to				
	monitor)/Approx. 5 x 3 7/8 x 3 inches, Approx. 5 x 3 7/8 x 2 1/2				
	inches (from grip to monitor)				
	Audio				
	Microphone: Built-in stereo microphone or XLR-K2M/XLR-				
	K1M/ECM-XYST1M (sold separately)				
	Speaker: Built-in, monaural				
	Operating Temperature: 32 - 104 degrees F / 0 - 40 degrees C				
69	Compact Document Scanner	unit	2	18,000.00	36,000.00
	25ppm/50ipm, 2-sided colour scan speed				·
	20 sheets Automatic Document Feeder (ADF)				
	Portable with micro-B USB3.0 Bus power				
	Dedicated plastic ID card slot				
	Scan to PC and USB host				
	Scali to FC alia usd 1108t				



	Scanning Speed: 25ppm (A4) 2-sided colour scan speed				
	Document Size-Multiple Papers-Width:51mm to 215.9 mm				
	Document Size-Multiple Papers-Length:70mm to 863mm				
	Document Size-Single Papers-Width:51mm to 215.9mm				
	Document Size-Single Papers-Length:70mm to 863mm				
	Colour/Black: Yes/Yes				
	Duplex Scan: Yes				
	Color Depth - Input: 48-bit colour processing				
	Color Depth - Output: 24-bit colour processing				
	Resolution - Optical: Max 600 dpi x 600 dpi				
	Resolution - Interpolated: Max 1,200 dpi x 1,200 dpi				
	Scanning Width: Max 216mm				
	Grayscale: 256 levels				
	Memory Capacity: SDRAM: 256 MB				
	ADF: up to 20 sheets				
	Interface: USB: Hi-Speed USB 2.0, Superspeed USB 3.0				
70	DHT11 Temperature/Humidity Sensor module for Arduino	unit	12	100.00	1,200.00
-	with wires, temp accuracy +-2°C				.,=
	DHT11 Temperature/Humidity Sensor module for Arduino with				
71	wires, temp accuracy +-2°C, functional and good quality NETBOOK		4	46 000 00	46 000 00
/1		unit	1	16,000.00	16,000.00
	PROCESSOR INTEL 4th GENERATION PROCESSOR or higher				
	PROCESSOR MODEL INTEL CORE i3/i5/i7				
	STORAGE CAPACITY 16GB or higher				
	SOLID STATE DISK CAPACITY 512GB or higher				
	MECHANICAL HARD DISK CAPACITY 500GB HDD or higher				
	SCREEN SIZE 15.6 INCHES - 14 INCHES				
72	SD Card, 1 TB	рс	3	800.00	2,400.00
	U3 4K C10 V30				
	Capacity: 1 TB				
	Compatibility: Compatible with microSDHC/SDXC,/SDHC UHS-I/microSDXC UHS-I supporting host devices				
	Sequential Read Performance: 200MB/s				
	Sequential Write Performance: 140MB/s				
	Dimension (L x W x H): 10.92mm x 14.99mm x 1.02mm				
	Desktop Computer, AMD Ryzen 5 5600G, 16GB RAM, GTX				
73	1660 ti	set	1	50,000.00	50,000.00
	Processor: AMD Ryzen 5 5600G 6 Cores & 12 Threads, 3.9				
	GHz Base Clock, 4.4 GHz Max Boost Clock, Socket AM4, 3MB				
	L2 & 16MB L3 Cache or higher				
	■Motherboard: AMD B550 Chipset Ultra Durable Motherboard				
	with 5+3 Phases Pure Digital VRM Solution with Low RDS(on)				
	MOSFETs, PCIe 4.0 x16 Slot, Dual PCIe 4.0/3.0 M.2				
	Connectors, Realtek GbE LAN, High Quality Audio Capacitors				
	and Audio Noise Guard for Ultimate Audio Quality or higher				
	■ Graphics: GTX 1660 ti				
	■Monitor: 24"				
	■Memory: 16GB DDR4 3200MHZ(8+8) or higher				
	■Storage: 512g SSD M2 or higher				



	■Storage: 1TB HDD				
	Keyboard and Mouse				
	■ Audio: HD audio Realtek				
74	Operating System: Genuine Windows 10 or higher Topog Contridge, HD 95A LCE295A, Place Topog Contridge, HD 95A LCE295A,	hov	4	2 500 00	14 000 00
74	Toner Cartridge, HP 85A CE285A, Black HP 85A (CE285A) toner cartridges work with: HP LaserJet Pro	box	4	3,500.00	14,000.00
	M1212nf, M1217nfw, P1102w, P1109w				
	HP 85A toner cartridge yield (approx.): 1,600 pages. Operating				
	temperature range is 10 to 32.5°C				
75	Network Infrastructure (Miscellaneous)	lot	1	91,000.00	91,000.00
	Network IP Phones:				
	3 units				
	Cisco CP-6821 (same existing fleet of VSU IP Phones)				
	IP Network Camera:				
	5 units				
	Hikvision, Dome type camera, 2 Mega Pixel IP67 (Same brand				
	of Existing VSU fleet camera)				
	3M Volition (Same fleet of VSU existing) Face plate with				
	module, flush type				
	*2 Ports Face plate with RJ-45 Module Cat 6				
	25 sets				
	3M Keystone-delete				
	Original 3M Volition-delete (Cat6 female Tool-less RJ45				
	Keystone-delete Mount)				
	Re-usable				
	Shallow Depth, Cable Entry from top or bottom				
	Keystone-delte Mounting				
	Accepts both solid conductors from AWG 26 to 22 and				
	stranded conductors				
	Integral shutter Benefits				
	Easy and quick to install				
	Integral shutter protects jack in the patch panel				
<u> </u>	*1 Port Face plate with RJ-45 Module Cat 6				
	25 sets				
	3M Keystone-delete				
	Original 3M Volition-delete (Cat6 female Tool-less RJ45 Keystone Mount)				
	Re-usable				
	Shallow Depth, Cable Entry from top to bottom				
	Keystone-delete Mounting				
	Accepts both solid conductors from AWG 26 to 22 and				
	stranded conductors				
	Integral shutter Benefits				
	Easy and quick to install				
	Integral shutter protects jack in the patch panel				
	Granding FA1-H Biometric System (Same with existing VSU				
	fleet)				
	2 units				
	Biometric System, finger print and facial recognition				
	Built-in backup battery				
		1			



	Network port				
76	1 Lot Network Switches	lot	1	450,000.00	450,000.00
	6 units	100	-	100,000100	100,000100
	Network Switches:				
	Units-HP Aruba 2530 (Based on VSU Existing HP fleet of				
	network equipment)				
	*PoE, PoE+ (370watts)				
	*24 ports				
	*Up to 104 Gbps capacity				
	*Layer 2				
	*Fast Ethernet, 1GbE				
	*Lifetime Warranty				
77	1 Lot Network Switches (2)	lot	1	190,000.00	190,000.00
	2 units				
	Network Switches:				
	HP Aruba 2540 (Based on VSU existing HP fleet of network				
	equipment)				
	PoE, PoE+ (370 watts)				
	24 ports				
	Up to 176 Gbps Switching capacity				
	Layer 2 with Static and RIP				
	1G, SFP, SFP+				
	Lifetime Warranty	+		40.000.00	
78	UTP Cable (305 meters), CAT 6 23 AWG	roll	3	10,000.00	30,000.00
	©UTP Cable cat6				
	©Cat 6 Cable UTP Unshielded AWG23				
	■ Gray Data LAN Cable	+ +			
	■1000 feet 305m 1000ft.				
70	must be UL listed & ISO certified cable	•		4 000 00	4 000 00
79	External Hard Disk Drive (Portable, 2TB), USB	unit	1	4,200.00	4,200.00
	Shock-absorbing	+ +			
	■Interface: USB 3.1 (Max.5Gb/s)				
	©Capacity: 2TB				
	■Texture: Plastic/Rubber				
	©Operating Voltage: DC 5V, 900mA	+			
	■System Requirements: Windows XP / Vista / 7 / 8 / 8.1 / 10, Mac OS X 10.6 or later, Linux Kernel 2.6 or later				
	DJI Inspire 2 TB50 Intelligent Flight Battery (compatible			46.000.00	40.000.00
80	with existing device)	рс	4	10,000.00	40,000.00
81	Lithium Polymer battery 2150MAH 11.V Sensefly Type 2150 MAH-Min 2150 mAh-24wh	рс	2	15,000.00	30,000.00
82	Computer Monitor 24", IPS, Bezel-less Full HD Monitor	set	8	10,000.00	80,000.00
	■Panel Type: IPS			1,10010	
	■Brightness(Typical): 250cd/m ²				
	■Brightness(Min): 200cd/m²	+ +			
	©Contrast Ratio Static: 1000:1(typical)				
	■Dynamic Contrast Ratio: MegaFlat	1			
	■Resolution: 1920x1080				



$\overline{}$	May Color Cunnarty May 16 7M				
	Max Color Support: Max 16.7M May Refresh Rever 75.1/-				
	Max Refresh Rate: Max 75Hz Max Refresh Rate: Max 75Hz				
00	■Interface: D-sub(x1), HDMI(x1)		45	2 500 00	FO FOO OO
83	External Hard Disk Drive (Portable, 1TB), USB 3.1	unit	15	3,500.00	52,500.00
	■Shock-absorbing				
	■Interface: USB 3.1 (Max.5Gb/s)				
	■Capacity: 1TB				
	■Texture: Plastic/Rubber				
	■Operating Voltage: DC 5V, 900mA				
	System Requirements: Windows XP / Vista / 7 / 8 / 8.1 / 10,				
0.4	Mac OS X 10.6 or later, Linux Kernel 2.6 or later		40	COO OO	C 000 00
84	Universal HDMI to VGA Adapter Cable, at least 1.8 meters	unit	10	600.00	6,000.00
85	Laptop	unit	1	80,000.00	80,000.00
	Laptop:Intel Core i7-12650H Processor 2.3 GHz (24M Cache, up to 4.7 GHz, 10 cores) or higher				
	16GB RAM or higher				
	512GB M.2 NVMe PCIe 3.0 SSD or higher				
	16.0-inch WUXGA (1920 x 1200) 16:10 aspect ratio LED				
	Backlit IPS-level Panel 120Hz refresh rate				
	NVIDIA Geforce RTX 3050 4GB Laptop GPU 4GB GDDR6				
	Wi-Fi 6E (802.11ax) (Dual band) 1*1 + Bluetooth 5.3 Wireless				
	Card				
	Windows 11 Home				
	with bag(backpack)				
86	Laptop	unit	1	49,999.00	49,999.00
	Operating System: Windows 11 Home Single Language				
	Operating System Architecture 64-bit				
	Processor: Intel Core™ i5 -12500H or higher				
	Processor Speed 2.50 GHz				
	Processor Core Dodeca-core (12 Core™)				
	Processor Generation 12th Gen				
	Graphics Controller Manufacturer: NVIDIA®				
	Graphics Controller Model GeForce® RTX™ 3050				
	Graphics Memory Capacity 4 GB GDDR6				
	Graphics Memory Accessibility				
	Dedicated				
	GPU Boost Clock Up to 1600 MHz				
	Maximum Graphics Power Up to 95 W				
	Screen Size: 39.6 cm (15.6")				
	Display Screen Type: LCD				
	Backlight Technology: LED				
	Screen Resolution: 1920 x 1080				
	Standard Refresh Rate: 144 Hz				
	Total Installed System Memory: 8 GB DDR4 SDRAM				
	Total Solid State Drive Capacity ; 512 GB				
	Solid State Drive Capacity , 312 GB Solid State Drive Interface				
	PCI Express Wireless LAN Standard				
	IEEE 802.11 a/b/g/n/ac/ax				



Wireless LAN Model		
Wi-Fi 6 AX 1650i		
Ethernet Technology		
Gigabit Ethernet		
Bluetooth 5.1 or above		
Built-in Devices		
Microphone		
Number of HDMI Outputs: 1		
Number of USB 3.2 Gen 1 Type-A Ports: 1		
Number of USB 3.2 Gen 2 Type-A Ports: 2		
Number of USB 3.2 Gen 2 Type-C Ports:1		
Total Number of USB Ports:4		
USB Type-C, USB Type-C Detail		
USB Type-C port supporting: USB 3.2 Gen 2 (up to 10 Gbps), DisplayPort over USB-C, Thunderbolt 4, USB charging 5 V; 3 A, DC-in port 20 V; 65 W		
Network (RJ-45)		
Pointing Device Type		
TouchPad		
Keyboard Backlight		
TouchPad Features		
Multi-touch Gesture		
4-cell Lithium Ion (Li-Ion) Battery		
Maximum Power Supply Wattage 180 W		
Product Color Obsidian Black		
Package Contents		
Nitro 5 AN515-58-50YE Gaming Notebook		
Lithium Ion Battery		
AC Adapter		
Security Features		
Firmware Trusted Platform Module (TPM) solution		
Kensington lock slot		
with bag(backpack)		
	TOTAL	4,381,299.00

DILBERTO O. FERRAREN

BAC Chairman