



BID BULLETIN 01

Date: October 31, 2023

Project Title: *Supply and Delivery of IT Equipment and Supplies (VSU-GOODS-23-46)*

Location: VSU Main, Visca, Baybay City, Leyte

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

I. LIST OF REQUIREMENTS

(1st Envelope) TECHNICAL COMPONENT ENVELOPE	
<i>Legal Documents</i>	
1	PhilGEPS Certificate of Registration (Platinum)
<i>Technical Documents</i>	
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 3,431,177.00)
	Or
	Statement of at least two (2) similar completed contracts w/ total amount of at least Php 3,431,177.00 and the largest of which should be at least Php 1,715,588.50 .
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 least 1 year for equipment and 3 months for supplies)
9	Original Duly Signed Omnibus Sworn Statement
<i>Financial Documents</i>	
10	The Supplier's Audited Financial Statements
11	Net Financial Contracting Capacity (at least Php 6,862,354.00)
	Or
	Committed Line of Credit (at least Php 686,235.40)
(2nd Envelope) FINANCIAL 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” **against each of the individual parameters of the specifications** 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:
- Omnibus Sworn Statement
 - Performance Securing Declaration (if applicable)
 - Price Schedule for Goods Offered
 - Bid Form
 - 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)

- Scan per document** into Portable Document Format (PDF) and should be printable.
- Properly label all 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 & Private Contracts	Statement of On-Going Contracts
3. Statement of Bidder's Single Largest Completed Contract	SLCC
4. Statement of at least two (2) similar completed contracts	Statement of Completed Contracts
5. Bid Security	Bid Security
6. Technical Specifications	Technical Specifications
7. SCHEDULE of Requirements/	Schedule of Requirements
8. Production and delivery schedule	
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 Mr. Leopoldo S. Escala Jr at leopoldo.escala@vsu.edu.ph on or before the deadline.

III. Changes in the Bidding Documents

Original	
<p>Section I. Invitation to Bid</p> <p>5. A complete set of Bidding Documents may be acquired by interested Bidders on n <i>19 October – 09 November 2023 until 8:30 AM</i> 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 Ten Thousand Pesos (PhP 10,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.</p>	<p><i>(Amendment)</i></p> <p>A complete set of Bidding Documents may be acquired by interested Bidders on <i>19 October – 09 November 2023 until 8:30 AM</i> 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 Ten Thousand Pesos (PhP 10,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means:</p> <p>The Bidders may deposit the payment for the bidding documents to the Visayas State University Landbank Account with the following details:</p> <p>Account Name: Visayas State University Fund 164 Account Number: <u>3572-1000-13</u></p> <p>Then send the deposit slip to leopoldo.escala@vsu.edu.ph</p>
<p>Section II. Instructions to Bidders</p> <p>15. Sealing and Marking of Bids</p>	<p><i>(Additional Instructions)</i></p> <p>Bidders are requested to submit three (3) copies of its bid – 1 Original, Copy 1, and Copy 2.</p> <p>For filing purposes, the bidders are urged to use Orange envelopes for its Technical and Financial Component envelopes, including the Mother (outer) Envelope.</p>



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	1TB, Hard disk Drive, 7200rpm, for desktop	pc	2	3,000.00	6,000.00
	☐1TB				
	☐SATA 6Gb/s interface optimizes burst performance;				
	☐64MB Cache				
	☐Average Data Rate, Read/Write : 156				
	☐Max Sustained Data Rate, OD Read (MB/s) : 210				
	☐Cache, Multisegmented (MB) : 64				
2	3D Printer Filament (ABS	pc	1	2,000.00	2,000.00
	☐Mass: 1 KG (approximately 2.20 lbs) Spool				
	☐Filament Diameter: 1.75mm (Dimensional Accuracy +/- 0.03m				
	☐Extrusion/Nozzle Temperature: 210°C - 240°C (410°F - 464°F)				
	☐Spool Diameter: 7.88"				
	☐Spool Width: 2.69"				
	☐Spool Hub Hole Diameter: 2.20"				
	☐Color: Black				
	☐Material Type: ABS				
3	3D Printer Filament (TPU)	set	1	1,500.00	1,500.00
	☐Color: black				
	☐Item Diameter: 1.75 millimeters				
	☐Item weight: not less than 15.7 ounces				
	☐Material: Rep-Flex-Tpu- Vacuumed Sealed With Desiccant				
	☐Outside Diameter: 1.75 millimeters (+/- 0.05mm)				
	☐Recommended Extrusion/Nozzle Temp: 195 - 230 degree celsius				
	☐Recommended Platform Temperature: 40 - 60 degree celsius				
	☐Packing List:TPU Flexible Filament 1.75mm 250g(vacuum sealed)				
4	3D Printer PLA filament	pc	1	2,000.00	2,000.00
	☐Recommended Extrusion/Nozzle Temp: 90°C - 220°C (374 °F~ 428 °F)				
	☐Heated Bed Temp: 25°C - 60°C (77 °F~ 140 °F)				
	☐Filaments Diameter and Accuracy: 1.75 mm +/- 0.05				
	☐Filaments Net Weight: 1 kg (2.2 lbs) / Spool				
	☐Build Surface: 200 mm x 200 mm (7.88" x 7.88")				
	☐Type of filament: PLA				
5	Android Smartphone	unit	1	7,000.00	7,000.00
	☐Specification:				
	—Chipset: Mediatek Helio G80 (12 nm)				
	—Operating system: Android 10				
	—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)				
6	Apple USB-C Digital AV Multiport Adapter Compatible with Mac and iPad	unit	1	4,000.00	4,000.00
	Connections: HDMI, USB, USB-C				
	Compatible iPad Models: iPad Pro 12.9-inch (5th generation), iPad Pro 12.9-inch (4th generation), iPad Pro 12.9-inch				
	Compatible Mac Models: MacBook Air (M2, 2022), MacBook Air (M1, 2020), MacBook Air (Retina, 13-inch, 2020), MacBook Air (Retina, 13-inch, 2018 - 2019), MacBook Pro (13-inch, M2, 2022), MacBook Pro (13-inch, M1, 2020)				
	Genuine Apple Accessory				
7	Camera with 28-70 mm Zoom Lens	unit	1	132,000.00	132,000.00
	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 and image sensor shift mechanism				
	Recording (still images)				
	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, 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), Copy				
	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)				
	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)			
	Peaking MF: Yes (Level setting: High/Mid/Low/Off, Color: White/Red/Yellow)			
	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 (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				
	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 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 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, 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, Hi-speed sync.4				
	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				
	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 5				
	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				
	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				
	Others				
	Operating Temperature: 32 - 104 degrees F / 0 - 40 degrees C				
8	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				
	Scanning Speed: 25ppm (A4) 2-sided colour scan speed				
	Document Size - Multiple Papers - Width: 51 mm to 215.9 mm				
	Document Size - Multiple Papers - Length: 70 mm to 863 mm				



	Document Size - Single Papers - Width: 51 mm to 215.9 mm				
	Document Size - Single Papers - Length: 70 mm to 863 mm				
	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				
9	Computer Printer	unit	1	15,000.00	15,000.00
	☑ Compact integrated tank design				
	☑ Print speeds up to 10.5ipm for black and 5.0ipm for colour				
	☑ Auto-duplex printing				
	☑ Wi-Fi & Wi-Fi Direct				
	☑ Borderless Printing up to A4 size				
	☑ Spill-free ink refilling				
	☑ Warranty of 2 years or 30,000 pages, whichever comes first				
	☑ Printer Type:				
	◀ Print, Scan, Copy				
	☑ Printing Technology:				
	☑ Print Method:				
	◀ On-demand inkjet (piezoelectric)				
	☑ Minimum Ink Droplet Volume:				
	◀ 3 pl				
	☑ Printer Language:				
	◀ ESC / P-R				
	☑ Print Direction:				
	◀ Bi-directional printing, Uni-directional printing				
	☑ Nozzle Configuration:				
	◀ 180 nozzles Black, 59 nozzles per colour (Cyan, Magenta, Yellow)				
	☑ Maximum Resolution:				
	◀ 5760 x 1440 dpi (with Variable-Sized Droplet Technology)				
	☑ Automatic 2-sided Printing:				
	◀ Yes (up to A4)				
	☑ Print Speed:				
	☑ Photo Default - 10 x 15 cm / 4 x 6 " *2:				
	◀ 1 Approx. 69 sec per photo (Border) *1				
	◀ Approx. 92 sec per photo (Borderless) *1				
	☑ Draft, A4 (Black / Colour):				
	◀ Up to 33 ppm / 15 ppm *1				
	☑ ISO 24734, A4 Simplex (Black / Colour):				
	◀ Up to 10.5 ipm / 5.0 ipm *1				



<input type="checkbox"/>	ISO 24734, A4 Duplex (Black / Colour):			
	◀Up to 6.0 ipm / 4.0 ipm *1			
<input type="checkbox"/>	Copy Speed:			
<input type="checkbox"/>	Copy Quality:			
	◀Draft / Standard / Best Quality			
<input type="checkbox"/>	Maximum Copies from Standalone:			
	◀99 copies			
<input type="checkbox"/>	Reduction / Enlargement:			
	◀25 - 400%, Auto Fit Function			
<input type="checkbox"/>	Maximum Copy Size:			
	◀A4, Letter			
<input type="checkbox"/>	ISO 29183, A4 Simplex Flatbed (Black / Colour):			
	◀Up to 7.7 ipm / 3.8 ipm			
<input type="checkbox"/>	Max Copy Resolution:0			
	◀1440 x 720 dpi			
<input type="checkbox"/>	Scan Function:			
<input type="checkbox"/>	Scanner Type:			
	◀Flatbed colour image scanner			
<input type="checkbox"/>	Sensor Type:			
	◀CIS			
<input type="checkbox"/>	Optical Resolution:			
	◀1200 x 2400 dpi			
<input type="checkbox"/>	Maximum Scan Area:			
	◀216 x 297 mm (8.5 x 11.7 ")			
<input type="checkbox"/>	Scanner Bit Depth (Colour):			
	◀48-bit input, 24-bit output			
<input type="checkbox"/>	Scanner Bit Depth (Grayscale):			
	◀16-bit input, 8-bit output			
<input type="checkbox"/>	Scanner Bit Depth (Black & White):			
	◀16-bit input, 1-bit output			
<input type="checkbox"/>	Scan Speed:			
<input type="checkbox"/>	Flatbed (Black / Colour):			
	◀200 dpi: 11 sec / 200 dpi: 28 sec			
<input type="checkbox"/>	Paper Handling:			
<input type="checkbox"/>	Number of Paper Trays:			
	◀1 (Paper Cassette)			
<input type="checkbox"/>	Standard Paper Input Capacity:			
	◀100 sheets, A4 Plain paper (80 g/m2)			
	◀20 sheets, Premium Glossy Photo Paper			
<input type="checkbox"/>	Output Capacity:			
	◀30 sheets, A4 Plain Paper			
	◀20 sheets, Premium Glossy Photo Paper			
<input type="checkbox"/>	Maximum Paper Size:			
	◀215.9 x 1200 mm (8.5 x 47.24 ")			
<input type="checkbox"/>	Paper Feed Method:			
	◀Friction feed			
<input type="checkbox"/>	Paper Size:			
	◀Legal, 8.5 x 13 ", Letter, A4, 195 x 270 mm, B5, A5, A6, 100 x 148 mm, B6, 5 x 7 ", 4 x 6 ", Envelopes #10, DL, C6			
<input type="checkbox"/>	Print Margin:			
	◀0 mm top, left, right, bottom via custom settings in printer driver (except plain paper) *3			



	☑Card Slot / USB Host Function:				
	☑Type of Direct Printing:				
	◀Memory Device				
	☑Supported Memory Cards:				
	◀SD Memory Card				
	☑Printer Software:				
	☑Operating System Compatibility:				
	◀Windows XP / XP Professional x 64 Edition / Vista / 7 / 8 / 8.1 / 10				
	◀Windows Server 2003 / 2008 / 2012 / 2016				
	◀Only printing and scanning functions are supported for Windows Server OS				
	◀Mac OS X 10.6.8 or later				
	☑Interface:				
	☑USB:				
	◀USB 2.0				
	☑Network:				
	◀Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct				
	☑Network Protocol:				
	◀TCP/IPv4, TCP/IPv6, LPD, IPP, PORT9100, WSD				
10	Computer Printer 3-in-1	unit	1	12,500.00	12,500.00
	☑with CIS Filled with Inks				
	☑Compact integrated tank design				
	☑High yield ink bottles				
	☑Spill-free, error-free refilling				
	☑Wi-Fi, Wi-Fi Direct				
	☑Borderless printing up to 4R				
11	Computer Printer, All-in-One/Multifunction Colored-Ink Tank	unit	5	14,000.00	70,000.00
	☑Ultra-low-cost printing: Print up to 4,500 pages in black and 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				
12	Data logger module for Arduino UNO	pc	2	360.00	720.00
	SD card interface works with FAT16 or FAT32 formatted cards.				
	3.3V level shifter circuitry prevents damage to your SD card.				
	Real time clock (RTC) keeps the time going even when the Arduino is unplugged.				
	Included libraries and example code for both SD and RTC, means you can get going quickly.				
	Prototyping area for soldering connectors, circuitry or sensors.				



13	Desktop Computer (i3, 11th Gen)(Assembled)	set	1	40,000.00	40,000.00
	☑Processor: Intel Core i3-11300 (4 cores /8 threads) or higher				
	☑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: atleast 23 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 (i7 Branded)	unit	2	75,000.00	150,000.00
	☑CPU: 11th Gen Intel Core i7 (8-Core, 12MB Cache, up to 4.7GHz with Intel Turbo Boost Technology) or higher				
	☑HDD: 256GB M.2 PCIe NVMe Solid State Drive or higher + 1TB 7200 rpm 3.5" SATA Hard Drive or higher				
	☑RAM: 8GB (8GBx1) DDR4 2666MHz or higher				
	☑Graphics: NVIDIA GeForce GTX 1650 4GB GDDR5 or higher				
	☑Screen: at least 23" IPS Monitor FHD				
	☑Optical Drive: No Optical Drive				
	☑USB Mouse and Keyboard				
	☑ Uninterruptible Power Supply (UPS): at least 600VA, at most 4 hours charging time				
	☑OS: Windows 10 Home Single Language (64bit) English or higher				
15	Desktop Computer, Assembled, 12th Gen Core i5	unit	1	50,000.00	50,000.00
	☑Processor: Intel Core i5 12500 with Intel® UHD Graphics 770 processor graphics or higher				
	☑Motherboard: Intel® H610 Motherboard with 6+1+1 Hybrid Phases Digital VRM Design, PCIe 4.0* Design, Gen3 x4 M.2, mATX form factor , Anti-Sulfur Resistor or higher				
	☑Memory: 16GB (2x8) 3200MHz DDR4 or higher				
	☑SSD: 500GB 3D NAND SSD PCIe Gen3x4 or higher				
	☑Casing: MATX casing with acrylic side panels				
	☑Power Supply: 450Watts 80+ Bronze Certified with 120mm thermally controlled low-noise cooling fan				
	☑Monitor: 23" IPS FHD, 72% NSTC color gamut with 75Hz refresh rate				
	☑Operating System: Genuine Windows 11 Pro				
	☑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				
	☑500W IC controlled AVR				
16	Desktop Computer, Assembled, 12th Gen Core i5, SDD and HDD	set	4	49,000.00	196,000.00
	☑Processor: Intel® Core i5 12th gen with Intel® UHD Graphics 730 or higher				



	<ul style="list-style-type: none"> ☑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	DHT11 Temperature/Humidity Sensor module for Arduino with wires, temp accuracy +-2°C	unit	12	80.00	960.00
	<i>DHT11 Temperature/Humidity Sensor module for Arduino with wires, temp accuracy +-2°C, functional and good quality</i>				
18	EPSON M200 Ink 774 black	btl	3	645.00	1,935.00
	<i>Epson Genuine 774 Pigment Black 140ml Ink for M200;</i>				
19	External Hard Drive, 1 TB	unit	2	3,000.00	6,000.00
	<i>Capacity: 1TB</i>				
	<i>Connection interface: USB 2.0/3.0</i>				
	<i>Storage Media: 2.5" SATA HDD</i>				
	<i>Op. Voltage: USB DC 5V</i>				
	<i>Size :129.5mm x 82.4mm x 20.4mm</i>				
	<i>Weight: 216g</i>				
20	Global Positioning System (GPS)	unit	1	35,000.00	35,000.00
	<i>4-inch dual-orientation,</i>				
	<i>glove friendly touchscreen display;</i>				
	<i>8 megapixel autofocus camera;</i>				
	<i>automatically geotags photos; tracks both GPS and GLONASS satellites;</i>				
	<i>1-year birds Eye Satellite Imagery subscription;</i>				
	<i>3-axis compass with barometric altimeter</i>				
21	HDMI Cable	pc	2	300.00	600.00
	<i>3m</i>				
22	HDMI Cable, 10m	pc	4	700.00	2,800.00
	☑10 meters				
	☑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.				



23	Headset with Noise Cancelling Mic	unit	2	1,800.00	3,600.00
	☑Input Impedance: at least 32 Ohms				
	☑Sensitivity (headphone):at least 94 dBV/Pa +/- 3 dB				
	☑Sensitivity (microphone): -17 dBV/Pa +/- 4 dB				
	☑Frequency response (Headset): 20 Hz - 20 KHz				
	☑Frequency response (Microphone): 100 Hz - 10 KHz				
	☑Cable Length: at least 7 ft				
	☑Connections: USB-A compatible (1.1, 2.0, 3.0), USB port 1 Type A port or adapter				
24	Ink Cartridge Canon G2010	pc	20	1,000.00	20,000.00
25	Ink continuous, refill, black (Brother DCP T310)	btl	10	400.00	4,000.00
	<i>Ink continuous, refill, black (Brother DCP T310) BTD60 BK - Black;</i>				
26	Ink, Brother BT5000C Cyan	btl	5	500.00	2,500.00
27	Ink, Brother BT5000M Magenta	btl	5	500.00	2,500.00
28	Ink, Brother BT5000Y Yellow	btl	5	500.00	2,500.00
29	Ink, Epson 003,Genuine Black 65mL	btl	35	350.00	12,250.00
30	Ink, EPSON 003,Genuine Cyan 65mL	btl	16	350.00	5,600.00
31	Ink, EPSON 003,Genuine Magenta 65mL	btl	11	350.00	3,850.00
32	Ink, EPSON 003,Genuine Yellow 65mL	btl	16	350.00	5,600.00
33	Ink, Epson, genuine, (BK) T664, 70 ml	pc	4	350.00	1,400.00
34	ANTI VIRUS 1 DEVICE 2 YEARS	pc	3	1,000.00	3,000.00
35	INTERNET SECURITY 1 DEVICE 1 YEAR	pc	3	700.00	2,100.00
36	Keyboard And Mouse Combo Bundle, USB powered	set	2	600.00	1,200.00
	☑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				
37	LCD Projector (XGA), 3LCD Technology	unit	22	25,000.00	550,000.00
	☑Projection System Technology: RGB liquid 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)				
	☑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				
38	LCD Projector, XGA (1024x768)	unit	13	27,000.00	351,000.00
	☑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				
39	Mouse, Wired, Optical, USB	pc	3	210.00	630.00
	☑USB Port Connectivity				
	☑Sensor: Optical				
	☑DPI: 1600				
	☑Work method: Wired				
	☑Buttons: Left button, middle button, right button				
	☑Scroll wheel direction: Two way				
	☑Design highlights: Easy installation. 1600 DPI high-definition tracking engine. Anti-slip scroll wheel. Full-size, ambidextrous design				
40	NETBOOK	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				
41	Printer, All-in-One Wireless Ink Tank Color	unit	16	11,000.00	176,000.00
	☑Product Description				
	◀Product Details of All-in-One Wireless Ink Tank Colour Printer				
	◀Printing resolution(dpi): 4800(horizontal) x 1200(vertical)				
	◀Interface: USB Port=Hi-Speed USB *1, LAN Port=Wireless LAN: IEEE802.11n / IEEE802.11g / IEEE802.11b*2				
	◀Multiple copy: Max. 20 pages				
	◀Maximum scanning size: A4/Letter, 8.5" x 11.7"/216x297 mm				
	◀Multiple Copy: Mx. 99 pages				
	◀Scanner Driver: Windows=TWAIN 1.9 Specification, WIA				
	◀Scanning resolution: optical resolution (horizontal x vertical)= 600 x 1200 dpi				



	◀ Gradation (input/Output): Gray=16bit/8bit, Color= RGB each 16bit/8bit				
	◀ Data Compressing System: Black=MH, MR, MMR, Color= JPEG				
	◀ Modem Speed: Max. 33.6 kbps				
	◀ Density adjustment: 3 levels				
	◀ Memory: Transmission/reception= approx. 50 pages				
	◀ Color: 200 x 200 dpi				
	◀ Operating System: Windows 10,8.1,7 SP1				
	◀ Hard Disk Space: 3.1GB				
	◀ Display: XGA 1024 x 768				
	◀ Connectivity Type: WiFi				
	◀ Wireless LAN: Supported Standards: IEEE802.11n / IEEE802.11g / IEEE802.11b				
	◀ Frequency bandwidth: 2.4 GHz				
	◀ WCN (WCN-NET) • Easy wireless connect				
	◀ Other Features: Administration password				
	◀ Other Supported OS: iOS, Android, Windows 10 Mobile				
	◀ Mobile Printing Capability: Google Cloud Print, Apple AirPrint				
42	Printer, computer, continuous ink system, 4-in-1 (Print, Scan, Xerox copy, Fax with ADF)	unit	3	22,000.00	66,000.00
	☑ Print Method: On-demand ink jet (piezoelectric)				
	☑ Minimum Ink Droplet Volume: 3 pl				
	☑ Print Direction: Bi-directional printing, Uni-directional printing				
	☑ Nozzle Configuration: 180 nozzles Black, 59 nozzles per colour (Cyan, Magenta, Yellow)				
	☑ Maximum Resolution: 5760 x 1440 dpi (with Variable-Sized Droplet Technology)				
	☑ USB: USB 2.0				
	☑ Network: Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct				
	☑ Network Protocol: TCP/IPv4, TCP/IPv6				
43	SD Card, 1 TB	pc	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				
44	Stereo Speaker for PC Desktop	pc	1	10,000.00	10,000.00
	Product Description				
	Quantum Duo PC speakers with the different color presets and lighting patterns				
	General Specifications:				
	Output power (W)20				
	Audio Specifications:				
	Dynamic frequency response range (Hz)				
	60 Hz - 20K Hz				
	Dimensions:				
	Dimensions (cm)				



	8.9 x 21 x 17.6				
	Dimensions (in)				
	3.5 x 8.3 x 6.9				
	Weight (kgs) 2.8				
	Weight (lbs)6.2				
	Control and Connection Specifications:				
	Bluetooth profiles				
	A2DP v1.3, AVRCP v1.5				
	Bluetooth frequency				
	2402 MHz - 2480 MHz				
	Bluetooth transmitted modulation				
	GFSK, $\pi/4$ DQPSK, 8DPSK				
	Bluetooth transmitter power				
	≤ 12.5 dBm (EIRP)				
	Bluetooth version				
	4.2				
45	Temperature and Humidity Sensor DHT11	pc	6	270.00	1,620.00
	Operating voltage: 3.3v-5.5v				
	Humidity measuring range: 20%-95%				
	Small plates PCB size: 3.2cm x 1.4cm				
46	Temperature and Humidity Sensor, DHT22	pc	6	350.00	2,100.00
	☑Sensing element				
	◀polymer capacitor				
	☑Power supply				
	◀3.3 to 6V DC				
	◀Operating range				
	◀0-100% RH;				
	◀-40 to 80 celsius Temp				
	☑Dimension				
	◀22 x 28 x 5 mm				
47	Temperature-Humidity Data Logger	pc	2	2,000.00	4,000.00
	☑Portable and hand-held				
	☑16000 data recording capacity.				
	☑Adjustable record interval: 10s~24hour				
	☑Multi-function LCD				
	☑Internal NTC temperature thermal sensor with optional external sensor				
	☑Data export in PDF/EXCEL via data management software				
	☑Selectable °F/°C temperature unit				
	☑Size: approx. 84 (L) x 44(W) x 20 (H) mm				
	☑Good quality				
	☑Durable				
48	UPS 800W (for Computer)	unit	3	5,000.00	15,000.00
	☑Charging time: At most 4 hours;				
49	USB Hub, 4 gangs	pc	4	680.00	2,720.00
	MS Universal USB 3.0 Multi-Port Socket at least 4 ports				
	Plug type: US, EU				
50	Web Camera for PC	unit	6	2,500.00	15,000.00
	☑Image sensor: 1 / 2.9				
	☑Lens: 3.6mm/75.7 °				
	☑Effective pixel: 1932 (H) * 1088 (V)				



	☑Horizontal resolution: 2MP				
	☑SNR: > 50dB				
	☑Video stream: H.264:1920 * 1080 / 1920 * 720 / 640 * 360 MJPEG: 1920 * 1080 / 1920 * 720 / 640 * 360				
	☑Video Frame rate: 25FPS / 30FPS				
	☑Electronic shutter: Auto				
	☑Protocol: UVC / UVA				
	☑Video output: USB video stream				
	☑Working voltage: DC5V / 160mA ± 6mA				
	☑Working environment: -20 °C to 60 °C				
51	Desktop Computer, AMD Ryzen 5 5600G, 16GB RAM, GTX 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				
	☑Operating System: Genuine Windows 10 or higher				
52	Laptop (Pentium Dual Core)	unit	2	30,000.00	60,000.00
	☑Processor: Intel Pentium Gold 4417u Processor or higher				
	☑Memory: at least 4GB DDR4 or higher				
	☑Storage: at least 128GB SSD				
	☑Display: 14" HD (1366x768) LED Display				
	☑Video Processor: nVidia MX110 2GB VRAM or higher				
	☑Connectivity: 802.11AC WiFi + BT USB3.0 Port HDMI Port				
	☑Operating System: Genuine Windows 10 Home				
53	Desktop Computer (i7) Branded, with 24" FHD IPS Monitor	unit	1	100,000.00	100,000.00
	☑Processor Type: Intel Core i7 (2.1 GHz base frequency, up to 4.9 GHz with Intel Turbo Boost Technology, 25 MB L3 cache, 12 cores, 20 threads) or higher				
	☑Memory: 16 GB DDR4-3200 SDRAM (1 x 16 GB) or higher				
	☑Hard Drive: 512 GB PCIe NVMe M.2 SSD; 1 TB 7200 rpm SATA HDD				
	☑OS: Windows 11				
	☑"Expansion Slot: 2 x PCI Express Slots (1 x PCI-Ex16, 1 x PCI-Ex1), 2 x M.2 Expansion Slots (1 for SSD; 1 for WLAN)", Expansion Bay: HDD 3.5" x 2 (or HDD 3.5" x 1 + HDD 2.5" x 1) + 9.5mm slim ODD x 1				
	☑Monitor: 24" FHD IPS Monitor				



	<ul style="list-style-type: none"> ☑Graphics: NVIDIA GeForce GTX 1660 SUPER (6 GB GDDR6 dedicated) 				
	<ul style="list-style-type: none"> ☑Power Supply: 350 W 80 Plus Gold certified power supply 				
	<ul style="list-style-type: none"> ☑Keyboard & Mouse: Wireless Keyboard and mouse combo 				
	<ul style="list-style-type: none"> ☑LAN: Integrated 10/100/1000 GbE LAN 				
	<ul style="list-style-type: none"> ☑"WLAN: Realtek Wi-Fi 6 (2x2) and Bluetooth 5.2 combo (Supporting Gigabit data rate) MU-MIMO supported " Bluetooth: YES 				
	<ul style="list-style-type: none"> ☑Ports: Front: 2 SuperSpeed USB Type-A 5Gbps signaling rate; 2 SuperSpeed USB Type-A 10Gbps signaling rate; 1 SuperSpeed USB Type-C 5Gbps signaling rate; Rear: 4 USB 2.0 Type-A 				
	<ul style="list-style-type: none"> ☑Speakers:, UPS, AVR 				
	<ul style="list-style-type: none"> ◀ Single USB cable for computers and laptops enjoy a hassle-free Audio experience with a single USB cable without the need for a power adapter 				
54	HP, Laser Jet 107a Toner HP 107A (W1107A), Black	pc	4	3,250.00	13,000.00
55	Printer, Tank Ink System, 3 in 1 (Print, Scan, Copy)	unit	1	11,000.00	11,000.00
	<ul style="list-style-type: none"> ☑Tank Ink System 				
	<ul style="list-style-type: none"> ☑Printer Type: Print, Scan and Copy 				
	<ul style="list-style-type: none"> ☑Scanner Type: Flatbed colour image scanner 				
	<ul style="list-style-type: none"> ☑Sensor Type: CIS 				
	<ul style="list-style-type: none"> ☑Optical Resolution: 600 x 1200 dpi 				
	<ul style="list-style-type: none"> ☑Copy Speed: Maximum Copies from Standalone: 20 copies 				
	<ul style="list-style-type: none"> ☑Maximum Copy Size: A4, Letter 				
	<ul style="list-style-type: none"> ☑ISO 29183, A4 Simplex Flatbed (Black / Colour): Up to 7.0 ipm / 1.7 ipm 				
	<ul style="list-style-type: none"> ☑Max Copy Resolution: 300 x 300 dpi 				
	<ul style="list-style-type: none"> ☑Paper Handling: Up to 20 Sheets-Premium Glossy Photo Paper 10 Sheets-Envelope, 30 Sheets-Postcard 				
	<ul style="list-style-type: none"> ☑Output Capacity: Up to 30 sheets 				
	<ul style="list-style-type: none"> ☑A4 plain paper: 20 sheets, Premium Glossy Photo Paper 				
	<ul style="list-style-type: none"> ☑Maximum Paper Size: 215.9 x 1200 mm (8.5 x 47.24") 				
	<ul style="list-style-type: none"> ☑Nozzle Configuration: 180 x 1 nozzles Black, 59 x 1 nozzles per colour (Cyan, Magenta, Yellow) 				
	<ul style="list-style-type: none"> ☑Print Direction: Bi-directional printing 				
	<ul style="list-style-type: none"> ☑Maximum Print Resolution: 5760 x 1440 dpi (with Variable-Sized Droplet Technology)5760 x 1440 dpi (with Variable-Sized Droplet Technology) 				
	<ul style="list-style-type: none"> ☑Minimum Ink Droplet Size: 3 pl 				
56	Toner Cartridge, HP 85A CE285A, Black	box	4	3,500.00	14,000.00
	<ul style="list-style-type: none"> HP 85A (CE285A) toner cartridges work with: HP LaserJet Pro M1212nf, M1217nfw, P1102w, P1109w 				
	<ul style="list-style-type: none"> HP 85A toner cartridge yield (approx.): 1,600 pages. Operating temperature range is 10 to 32.5°C 				
57	1 Lot LAN Cable	lot	1	84,000.00	84,000.00
	<ul style="list-style-type: none"> 7 spools 				
	<ul style="list-style-type: none"> LAN Cable, Cat 6 (VSU existing fleet Belden) 				
	<ul style="list-style-type: none"> Cat6 UTP cable, 4 pairs, AWG23, e-spline center, UL listed, ISO, 305m(1000ft)/spool 				



58	1 Lot 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 at 3,500.00				
	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 at 850.00				
	3M Keystone				
	Original 3M Volition (Cat6 female Tool-less RJ45 Keystone Mount)				
	Re-usable				
	Shallow Depth, Cable Entry from top or bottom				
	Keystone 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				
	*1 Port Face plate with RJ-45 Module Cat 6				
	25 sets at 450.00				
	3M Keystone				
	Original 3M Volition (Cat6 female Tool-less RJ45 Keystone Mount)				
	Re-usable				
	Shallow Depth, Cable Entry from top to bottom				
	Keystone 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 at 10,000.00				
	Biometric System, finger print and facial recognition				
	Built-in backup battery				
	Network port				
59	1 Lot Network Switches	lot	1	450,000.00	450,000.00
	6 units at 75,000.00 each				
	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				
60	1 Lot Network Switches (2)	lot	1	190,000.00	190,000.00
	2 units at 95,000.00 each				
	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				
61	1 Lot Uninterruptible Power Supply (UPS)	lot	1	54,000.00	54,000.00
	UPS: 9 units at 6,000.00				
	1000 watts, 1500VA, Universal type of outlet, built-in AVR				
62	Network Wifi Access Points	lot	1	300,000.00	300,000.00
	20 units Network WiFi Access Points				
	Unifi Nano HD				
	(Existing fleet of VSU Wifi Access Points)				
63	Network Switch	unit	4	15,000.00	60,000.00
	☑Standards: IEEE 802.3, 802.3u, 802.3x, 802.3ab, 802.3az				
	☑Number of Ports: 24 Gigabit				
	☑Speed: 10/100/1000				
	☑Bandwidth: 48 Gbps (non-blocking)				
	☑Performance: Full line rate and forwarding rate of 64B frame at: 1.488Mpps for 1000M port, 0.1488Mpps for 100M port, 0.01488Mpps for 10M port				
	☑Quality of Service: 802.1p and DSCP				
	☑MAC Address Table: 8K				
64	UTP Cable (305 meters), CAT 6 23 AWG	roll	3	7,500.00	22,500.00
	☑UTP Cable cat6				
	☑Cat 6 Cable UTP Unshielded AWG23				
	☑Gray Data LAN Cable				
	☑1000 feet 305m 1000ft.				
	☑must be UL listed & ISO certified cable				
65	Laptop, 14" (i7)	unit	5	75,000.00	375,000.00
	☑Processor: Intel Core i7 10th generation or higher				
	☑Graphics: NVIDIA GeForce MX250 at least 2GB GDDR5				
	☑Memory: at least 8GB DDR4-2666				
	☑Storage: at least 256GB SSD M.2 + 1TB HDD				
	☑Display: 14" FHD (1920x1080) IPS 250nits Anti-glare				
	☑Touchscreen: None				
	☑Optical: None				
	☑Media Reader: 4-in-1 Card Reader				
	☑Ethernet: None				
	☑WLAN + Bluetooth				
	☑Camera: at least 720p				
	☑Microphone: at least 2x, Array				
	☑Operating System: licensed Windows 10 Home or Pro				
	☑Bundled Software: Microsoft Office Perpetual License				



	☑Repair and replacement should be at most 3 month from returning the unit				
	☑at least 3 years Warranty				
	☑FREE: Backpack				
66	HDMI to HDMI cable	pc	30	500.00	15,000.00
	chord 1.8 meter long				
67	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				
68	Multimedia Speakers 2.0, 6W, USB powered	pair	2	600.00	1,200.00
	Total Output Power (RMS): 6W				
	Satellite wattage (RMS):3W				
	Satellite Driver : Size : 2.5"				
	Frequency Range: 70-20000 Hz				
	Interface: 3.5mm jack				
	Housing material : ABS				
	Controls: Overall Volume				
	Power Supply: via USB, 5V				
69	DJI Inspire 2 TB50 Intelligent Flight Battery	pc	4	10,000.00	40,000.00
70	Lithium Polymer battery 2150MAH 11.V Sensefly Type 2150 MAH-Min 2150 mAh-24wh	pc	2	15,000.00	30,000.00
71	A4 Pigment Printer	lot	1	20,000.00	20,000.00
72	Smartphone for 3D and Internet-of-Things Development and Controls	unit	1	80,000.00	80,000.00
	6-core CPU with 2 performance and 4 efficiency cores; 5-core GPU; 16-core Neural Engine				
	Gold Finish				
	6.1-inch (diagonal) all-screen OLED display				
	2556-by-1179-pixel resolution at 460 ppi				
	256 GB				
	Rated IP68 (maximum depth of 6 meters up to 30 minutes) under IEC standard 60529				
	TrueDepth camera for facial recognition				
	Precision dual-frequency GPS (GPS, GLONASS, Galileo, QZSS, and BeiDou)				
	Digital compass				
	Wi-Fi				
	Cellular				
	iBeacon microlocation				
	LiDAR Scanner				
	Barometer				
	High dynamic range gyro				
	High-g accelerometer				
	Proximity sensor				
	Dual ambient light sensors				
73	Arduino UNO microcontroller, Microchip AT mega328P	unit	6	1,500.00	9,000.00
74	Computer Monitor 24", IPS, Bezel-less Full HD Monitor	set	8	7,000.00	56,000.00



	☑Panel Type: IPS				
	☑Brightness(Typical): 250cd/m ²				
	☑Brightness(Min): 200cd/m ²				
	☑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)				
75	CPU (Central Processing Unit)	pc	2	15,000.00	30,000.00
	☑AMD A10-8770 Processor <i>or higher</i>				
	☑Motherboard compatible with the processor				
	☑Kingston 4GB DDR4-2666 Memory <i>or higher</i>				
	☑CPU Casing w/ PSU				
	☑256GB SSD				
76	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, Mac OS X 10.6 or later, Linux Kernel 2.6 or later				
77	Ink, T05C1, BLACK, Genuine	pack	10	8,000.00	80,000.00
	(for Epson C878R WorkForce Pro A3 Colour Multifunction Printer, Replaceable Ink Pack System RIPS Original Pigment Inks)				
78	Ink, T05C2, Cyan, Genuine	pack	10	9,000.00	90,000.00
	(for Epson C878R WorkForce Pro A3 Colour Multifunction Printer, Replaceable Ink Pack System RIPS Original Pigment Inks)				
79	Ink, T05C3, Magenta, Genuine	pack	10	9,000.00	90,000.00
	(for Epson C878R WorkForce Pro A3 Colour Multifunction Printer, Replaceable Ink Pack System RIPS Original Pigment Inks)				
80	Ink, T05C4, Yellow, Genuine	pack	10	9,000.00	90,000.00
	(for Epson C878R WorkForce Pro A3 Colour Multifunction Printer, Replaceable Ink Pack System RIPS Original Pigment Inks)				
81	Laptop 14" (i5)	unit	20	49,500.00	990,000.00
	☑Processor: Intel Core i5-1035G1 Processor 1.0 GHz 6M Cache, up to 3.60 GHz or higher				
	☑Operating system: Windows 10 Home				
	☑Memory: 4GB memory, 1 x SO-DIMM socket (for expansion) or higher				
	☑Display: 14.0" (16:9) LED-backlit FHD (1920x1080) 60Hz Anti-Glare Panel with 45% NTSC				
	☑Video Processor: NVIDIA GeForce MX330 , with 2GB GDDR5 VRAM or higher				
	☑Storage: 512GB PCIe Gen3 x2 SSD				



82	Universal HDMI to VGA Adapter Cable, at least 1.8 meters	unit	10	600.00	6,000.00
83	Desktop Computer with 2 Units Printer	lot	1	120,000.00	120,000.00
	<i>Desktop Computer with 2 units Printers</i>				
	<i>Intel Core i7-13400, 10C (6P + 4E) / 16T, P-core 2.5 / 4.6GHz, E-core 1.8 / 3.3GHz, 20MB or higher</i>				
	<i>mATX B760 Chipset Motherboard with Hybrid 8+1+1 Phases Digital VRM Solution/ Advanced Thermal Design & M.2 Thermal Guard</i>				
	<i>16GB UDIMM DDR4-3200 or higher</i>				
	<i>1TB SSD M.2 2280 PCIe 4.0x4 NVMe</i>				
	<i>600Watts Bronze Certified PSU or higher</i>				
	<i>Casing with Acrylic Side Panels</i>				
	<i>NVIDIA GeForce RTX 3050 8GB GDDR6</i>				
	<i>Wi-Fi 6, 11ax 2x2 + BT5.1</i>				
	<i>24" IPS Monitor, 75Hz</i>				
	<i>4 outlets (4 NEMA 5-15R), 650VA/360W, AVR Technology, Surge Protection,UPS</i>				
	<i>Genuine Windows 11 Home</i>				
	<i>With: UPS, Keyboard, Mouse, Web Camera and Headset</i>				
	<i>Computer Printer, All-in-One Multifunction, Colored Ink Tank</i>				
84	Laptop	unit	1	80,000.00	80,000.00
	<i>Laptop: Intel Core i7-12650H Processor 2.3 GHz (24M Cache, up to 4.7 GHz, 10 cores) or higher</i>				
	<i>16GB RAM or higher</i>				
	<i>512GB M.2 NVMe PCIe 3.0 SSD or higher</i>				
	<i>16.0-inch WUXGA (1920 x 1200) 16:10 aspect ratio LED Backlit IPS-level Panel 120Hz refresh rate</i>				
	<i>NVIDIA Geforce RTX 3050 4GB Laptop GPU 4GB GDDR6</i>				
	<i>Wi-Fi 6E (802.11ax) (Dual band) 1*1 + Bluetooth 5.3 Wireless Card</i>				
	<i>Windows 11 Home</i>				
85	Epson 003 Ink Bottle for Epson L3150, Black	btl	6	400.00	2,400.00
86	Epson 003 Ink Bottle for Epson L3150, CYAN	btl	6	400.00	2,400.00
87	Epson 003 Ink Bottle for Epson L3150, MAGENTA	btl	6	400.00	2,400.00
88	Epson 003 Ink Bottle for Epson L3150, YELLOW	btl	6	400.00	2,400.00
89	Router, Wireless	pc	1	4,900.00	4,900.00
	<i>☑Enjoy the benefits of Wireless-N300 (802.11n) in your home ideal for surfing the web, emailing and printing wirelessly</i>				
	<i>☑Connect your computers, wireless printers, smartphones, and other wireless devices at up to 300 Mbps transfer speed</i>				
	<i>☑Enjoy broad wireless coverage provided by MIMO antenna technology</i>				
	<i>☑Use four Fast Ethernet (10/100 Mbps) ports to directly connect wired devices</i>				
	<i>☑Keep your network protected with customizable security settings, including WPA/WPA2 Personal and SPI firewall protection</i>				
90	Laptop	unit	1	49,999.00	49,999.00
	<i>Operating System</i>				



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 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 Standard				
Bluetooth 5.1 or above				
Built-in Devices				
Microphone				
Interfaces/Ports				
HDMI				
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				
	Miscellaneous				
	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				
	Rebidding - VSU-GOODS-23-36				
91	4000W Power Inverter + 3A solar controller kit	set	1	5,000.00	5,000.00
	Specifications:				
	Output Voltage 220V				
	Color: Yellow Black				
	Material: Plastic				
	Waveform: Modified Sine Wave				
	Surge Peak Power: 4000W				
	Input voltage: 12V				
	Input voltage Range; 9.5V - 15.5V				
	Output Voltage Range: 220V+ 10%				
	Frequency: 50Hz				
	Efficiency 90%				
	Circuit topology push-pull				
	No load current < 0.7A				
	Low voltage protection: Minimum protection voltage 9.5V				
	High voltage protection: Max protection voltage 15.5V				
	Overload protection: Yes				
	Output short circuit protection: Yes				
	Positive and negative reverse connection protection: YES				
	Output regulation: Yes				
	Display Scree: Display Output Voltage Battery Voltage				
	Input terminal wiring: terminal				
	Output interface: 1Socket, 2* USB				
	USB Output 2.14				
	Car Cigarette Plug Length: 42.5cm/16.7inch				
	Battery clips length 46.8cm / 6.334.4* 2.2 inch				
	(NOTE: see attached specifications)				
92	Automatic Voltage Regulator, 5000 VA, Servo-motor controlled	pc	1	8,000.00	8,000.00
	Capacity: 5000 VA				
	Input Voltage: 160-240 V				
	Output Voltage: 110/220 V				
	Phase: Single				
	Control System: Servo-Motor Control				
	Response Time: within 4sec against 10%, Input Fluctuation				



	Overload Protection				
	Time Delay Function				
	Analog Volt Meter and Ammeter				
93	Camera	unit	1	55,000.00	55,000.00
	SENSOR TYPE: 1.0-type (13.2 mm x 8.8 mm) Exmor RS® CMOS sensor, aspect ratio 3:2				
	NUMBER OF PIXELS (EFFECTIVE): Approx. 20.1 Megapixels				
	LENS TYPE: ZEISS® Vario-Sonnar® T* Lens, 10 elements in 9 groups (9 aspheric elements including AA lens)				
	F-NUMBER (MAXIMUM APERTURE): F1.8(W)-2.8(T)				
	ND-FILTER: Auto/On (3 steps)/Off				
	FOCAL LENGTH: f = 8.8-25.7 mm				
	ANGLE OF VIEW (35 MM FORMAT EQUIVALENT): 84 deg-34 deg (f = 24-70 mm) ² 3				
	FOCUS RANGE (FROM THE FRONT OF THE LENS): iAuto: AF (W: Approx. 5 cm (0.17 ft) to Infinity, T: Approx. 30 cm (0.99 ft) to Infinity) / Program Auto: AF (W: Approx. 5 cm (0.17 ft) to Infinity, T: Approx. 30 cm (0.99 ft) to Infinity)				
	OPTICAL ZOOM: 2.9x				
	CLEAR IMAGE ZOOM (STILL IMAGE): 20 M Approx. 5.8x/10 M Approx. 8.2x/5.0 M Approx. 11x/VGA Approx. 44x				
	CLEAR IMAGE ZOOM (MOVIE): 4K: 4.35x, HD: Approx. 5.8x				
	DIGITAL ZOOM (STILL IMAGE): 20 M Approx. 11x/10 M Approx. 16x/5.0 M Approx. 23x/VGA Approx. 44x				
	DIGITAL ZOOM (MOVIE): Digital Zoom Approx. 11x				
	SCREEN TYPE: 7.5 cm (3.0 type)(4:3)/1,228,800 dots/Xtra Fine/TFT LCD				
	ADJUSTABLE ANGLE: Up by approx. 180 degrees, down by approx. 45 degrees				
	DISPLAY SELECTOR (FINDER/LCD): Auto/EVF (Manual)/Monitor(Manual)				
	MS ASSIST MAGNIFICATION: 5.3x, 10.7x				
	SCREEN TYPE/NUMBER OF DOTS: 0.39-type electronic viewfinder(OLED), 2,359,296 dots				
	FIELD COVERAGE: 100%				
	MAGNIFICATION: Approx. 0.59x with 50 mm lens at infinity, -1m-1(diopter) (35 mm equiv.)				
	EYE POINT: Approx. 20 mm from the eyepiece, 19.2 mm from the eyepiece frame at -1m-1(diopter) (CIPA standard)				
	DIOPTRE ADJUSTMENT: -4.0 to +3.0 m-1				
	BRIGHTNESS CONTROL: Auto, Manual (5 steps)				
	IMAGE PROCESSING ENGINE: Yes (BIONZ X)				
	STEADYSHOT (STILL IMAGE): Optical				
	STEADYSHOT (MOVIE): Yes (Intelligent Active Mode, Optical type with electronic compensation, Anti Rolling type)				
	FOCUS TYPE: Fast Hybrid AF(phase-detection AF/contrast-detection AF)				



	FOCUS MODE: Single-shot AF, Automatic AF, Continuous AF, DMF, Manual Focus				
	FOCUS AREA: Wide (315 points (phase-detection AF), 25 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				
	LOCK ON AF: Yes				
	LIGHT METERING MODE: Multi Pattern, Center-Weighted, Spot, Entire Screen Avg, Highlight				
	EXPOSURE COMPENSATION: +/- 3.0 EV, 1/3 EV step				
	ISO SENSITIVITY (STILL IMAGE)(RECOMMENDED EXPOSURE INDEX)				
	Auto (ISO125-12800, selectable with upper/lower limit),125/160/200/250/320/400/500/640/800/1000/1250/1600/2000/2500/3200/4000/5000/6400/8000/10000/12800 (Extendable to ISO80/100),Multi-Frame NR: Auto(ISO125-12800), 200/400/800/1600/3200/6400/12800/2560056				
	ISO SENSITIVITY (MOVIE)				
	Auto: (ISO125–ISO12800, selectable with upper/lower limit), 125/160/200/250/320/400/500/640/800/1000/1250/1600/2000/2500/3200/4000/5000/6400/8000/10000/12800				
	MINIMUM ILLUMINATION (MOVIE): Auto:1.2 lux(Shutter Speed 1/30")				
	WHITE BALANCE MODES: Auto, Daylight, Shade, Cloudy, Incandescent, Fluor.: Warm White, Fluor.: Cool White, Fluor.: Day White, Fluor.: Daylight, Flash, Underwater Auto, C.Temp./Filter, Custom				
	WB MICRO ADJUSTMENT: Yes				
	SHUTTER SPEED				
	iAuto (4" - 1/2000)/Program Auto (30" - 1/2000)/Manual (Bulb, 30" - 1/2000)/Aperture Priority (30" - 1/2000)/Shutter Priority (30" - 1/2000)				
	ELECTRONIC SHUTTER				
	iAuto (4" - 1/32000)/Program Auto (30" - 1/32000)/Manual (30" - 1/32000)/Aperture Priority (30" - 1/32000)/Shutter Priority (30" - 1/32000)				
	APERTURE				
	iAuto (F1.8/F11(W)) / Program Auto(F1.8/F11(W)) / Manual(F1.8/F11(W)) / Shutter Priority(F1.8/F11(W)) / Aperture Priority(F1.8/F11(W))				
	IMAGE CONTROL				
	Contrast, Saturation, Sharpness, Creative Style, Color Space (sRGB/Adobe RGB), Quality (RAW/RAW&JPEG (Extra fine, Fine, Standard)/JPEG (Extra fine, Fine, Standard)				
	NOISE REDUCTION				
	Long exposure NR: On/Off, available of shutter speeds longer than 1/3 sec., high ISO NR: Normal/Low/Off, Multi Frame NR: Auto, ISO200-25600				
	DYNAMIC RANGE FUNCTIONS				



	Off, Dynamic Range Optimizer (Auto/Level 1-5), Auto High Dynamic Range (Auto Exposure Difference, Exposure Difference Level (1.0–6.0 EV, 1.0 EV step))				
	SHOOTING MODE				
	AUTO(Intelligent Auto/Superior Auto), Program Auto, Aperture Priority, Shutter Speed Priority, Manual Exposure, MR(Memory Recall) [body 3 sets/memory card 4 sets], Movie Mode(Program Auto, Aperture Priority, Shutter Speed Priority, Manual Exposure),HFR Mode (Program Auto, Aperture Priority, Shutter Speed Priority, Manual Exposure), Panorama, Scene Selection				
	SCENE SELECTION				
	Portrait, Sports Action, Macro, Landscape, Sunset, Night Scene, Handheld Twilight, Night Portrait, Anti-Motion Blur, Pet Mode, Gourmet, Fireworks, High Sensitivity				
	CONTINUOUS SHOOTING SPEED (MAXIMUM) (WITH MAX. RECORDING PIXELS)				
	Continuous Shooting Hi: approx. 24fps, Continuous Shooting Mid: approx. 10fps, Continuous Shooting Low: approx. 3.5fps 8910				
	SELF-TIMER				
	10 s / 5 s / 2 s / 3 or 5 consecutive shots with 10 s, 5 s, or 2 s delay selectable / Bracketing shots with 10 s, 5 s, or 2 s delay selectable				
	DRIVE MODES				
	Single, Continuous shooting (Hi/Mid/Lo), Self-timer, Self-timer(cont.), Cont.-bracketing11, Single-bracketing11, White balance bracketing11, DRO bracketing11				
	PANORAMA (SHOOTING): Sweep Panorama				
	PICTURE EFFECT				
	[Still Image]:Toy camera, Pop Color, Posterization, Retro Photo, Soft High-key, Partial Color, High Contrast Mono., Soft Focus, HDR Painting, Richtone Monochrome, Miniature, Watercolor, Illustration; [Movie]:Toy camera, Pop Color, Posterization, Retro Photo, Soft High-key, Partial Color, High Contrast Mono.				
	CREATIVE STYLE				
	Standard, Vivid, Neutral, Clear, Deep, Light, Portrait, Landscape, Sunset, Night Scene, Autumn Leaves, Black & White, Sepia, Style Box				
	PICTURE PROFILE				
	off/PP1-PP7(Black Level, Gamma (Movie, Still, Cine1-2, ITU709, ITU709 [800%], S-Log2), Black Gamma, Knee, Color Mode, Saturation, Color Level, Color Phase, Color Depth, Detail, Copy, Reset)				
	NUMBER OF RECOGNISED SCENES				
	Still Image:Superior Auto: 44 / iAuto: 33, Movie:44				
	FLASH MODE: Auto/Flash On/Slow Synchro/Rear Sync/Flash Off				
	FLASH TYPE: Built-in, manual pop-up				
	AF ILLUMINATOR: Auto / Off				
	BRACKETING: Yes				
	FLASH RANGE				



	ISO Auto: Approx.0.4 m to 10.2 m (1.31 ft to 33.46 ft) (W) / Approx. 0.4 m to 6.5 m (1.31 ft to 21.33 ft) (T), ISO12800: up to Approx. 20.4 m (66.93 ft.) (W) / Approx. 13.0 m (42.65 ft.) (T)				
	COMPATIBLE RECORDING MEDIA				
	Memory Stick Duo, Memory Stick PRO Duo, Memory Stick PRO Duo (High Speed), Memory Stick PROHG Duo, Memory Stick Micro1, Memory Stick Micro (Mark2), SD Memory Card, SDHC Memory Card(UHS-I), SDXC Memory Card (UHS-I), microSD Memory Card, microSDHC Memory Card, microSDXC Memory Card				
	RECORDING FORMAT				
	[Still Image]: JPEG(DCF Ver.2.0, Exif Ver.2.31, MPF Baseline compliant), RAW (Sony ARW 2.3 format); [Movie]: XAVC S, AVCHD format Ver.2.0 compatible				
	RECORDING FORMAT (MOVIE AUDIO)				
	XAVC S: LPCM 2ch, AVCHD: Dolby Digital (AC-3) 2ch (Dolby Digital Stereo Creator)				
	COLOUR SPACE (STILL)				
	sRGB, Adobe® RGB				
	DCF/DPOF				
	DCF/DPOF/EXIF/MPF				
	STILL IMAGE NUMBER OF RECORDED PIXELS (IMAGE SIZE)				
	3:2 mode: 20M (5,472 x 3,648) / 10M (3,888 x 2,592) / 5M (2,736 x 1,824), 4:3 mode:18M (4,864 x 3,648) / 10M (3,648 x 2,736) / 5M (2,592 x 1,944) / VGA,16:9 mode:17M (5,472 x 3,080) / 7.5M (3,648 x 2,056) / 4.2M (2,720 x 1,528), 1:1 mode: 13M (3,648 x 3,648) / 6.5M (2,544 x 2,544) / 3.7M (1,920 x 1,920), Sweep Panorama: Wide (12,416 x 1,856/5,536 x 2,160), Standard (8,192 x 1,856/3,872 x 2,160)				
	MOVIE RECORDING MODE (NTSC)				
	NTSC/PAL Selector: [NTSC] AVCHD: 24 M FX (1,920x1,080/60i)/17 M FH (1,920x1,080/60i), XAVC S 4K: 30p 100 M (3,840x2,160/30p)/30p 60 M (3,840x2,160/30p)/24p 100 M (3,840x2,160/24p)/24p 60 M (3,840x2,160/24p), XAVC S HD: 60p 50 M (1,920x1,080/60p)/60p 25 M (1,920x1,080/60p)/30p 50 M (1,920x1,080/30p)/30p 16 M (1,920x1,080/30p)/24p 50 M (1,920x1,080/24p)/120p 100 M (1,920x1,080/120p)/120p 60 M (1,920x1,080/120p)				
	MOVIE RECORDING MODE (PAL)				
	NTSC/PAL Selector: [PAL] mode AVCHD: 24 M FX (1,920x1,080/50i)/17 M FH (1,920x1,080/50i), XAVC S 4K: 25p 100 M (3,840x2,160/25p)/25p 60 M (3,840x2,160/25p), XAVC S HD:50p 50 M (1,920x1,080/50p)/50p 25 M (1,920x1,080/50p)/25p 50 M (1,920x1,080/25p)/25p 16 M (1,920x1,080/25p)/100p 100 M (1,920x1,080/100p)/100p 60 M (1,920x1,080/100p),				
	HFR				
	(Recording) NTSC/PAL Selector: [PAL] mode XAVC S HD:50p 50M(1920x1080/250fps), 50p				



	50M(1920x1080/500fps), 50p 50M(1920x1080/1000fps) / 25p 50M(1920x1080/250fps), 25p 50M(1920x1080/500fps), 25p 50M(1920x1080/1000fps), NTSC/PAL Selector: [NTSC] mode XAVC S HD:60p 50 M (1,920x1,080/240fps), 60p 50 M (1,920x1,080/480fps), 60p 50 M (1,920x1,080/960fps)/30p 50M (1,920x1,080/240fps), 30p 50 M (1,920x1,080/480fps), 30p 50 M (1,920x1,080/960fps)/24p 50 M (1,920x1,080/240fps), 24p 50 M (1,920x1,080/480fps), 24p 50 M (1,920x1,080/960fps) (Sensor Readout Number of effective pixels) Quality Priority: 240fps/250fps (1,824x1,026), 480fps/500fps (1,824x616), 960fps/1000fps (1,244x420)/Shoot Time Priority: 240fps/250fps (1,824x616), 480fps/500fps (1,292x436),960fps/1000fps (912x308)				
	STILL IMAGE NUMBER OF RECORDED PIXELS (IMAGE SIZE) DURING MOVIE				
	16:9 mode: 17M(5472x3080)/7.5M(3648x2056)/4.2M(2720x1528)				
	PROXY RECORDING				
	Yes(1280 x 720 [approx. 9 Mbps])				
	INPUT AND OUTPUT TERMINALS: Multi/Micro USB Terminal14, High-Speed USB (USB 2.0), Micro HDMI				
	NFC: NFC forum Type 3 Tag compatible, One-touch remote, One-touch sharing				
	WI-FI: Yes (IEEE802.11b/g/n(2.4 GHz band))				
	POWER SOURCE				
	DC 3.6 V(supplied battery) / DC 5.0 V(supplied AC Adapter)				
	BATTERY SYSTEM				
	Rechargeable Battery Pack NP-BX1				
	POWER CONSUMPTION (CAMERA MODE)				
	Approx. 2.6 W with LCD monitor and approx. 3.0 W with viewfinder (CIPA standard)				
	USB CHARGE/USB POWER SUPPLY				
	Yes (Shooting, Playback)				
	BATTERY LIFE(STILL IMAGES)(CIPA)				
	Monitor:Approx. 220 / Approx. 110 min., ViewFinder:Approx. 210/Approx. 105 min.				
	BATTERY LIFE(MOVIES ACTUAL SHOOTING)(CIPA)				
	Monitor:Approx. 35 min., ViewFinder:Approx. 35 min.				
	BATTERY LIFE(MOVIES CONTINUOUS SHOOTING)(CIPA)				
	Monitor:Approx. 65 min., ViewFinder:Approx. 65 min.				
	DIMENSIONS (W X H X D) (APPROX.)				
	101.6x58.1x41.0 mm (4 in x 2 3/8 in x 1 5/8 in)				
	WEIGHT (CIPA COMPLIANT)				
	Approx. 299 g (10.5 oz)(Battery and Memory Stick Duo are included) / Approx. 272 g (9.6 oz)(Body Only)				
94	Digital Multimeter	pc	1	7,000.00	7,000.00
	DCV: 400m/4/40/400/1000V				
	ACV: 4/40/400/1000V ±(1.2%+7)				
	DCA: 400µ/4000µ/40m/400m/4/10A				



	ACA: 400μ/4000μ/40m/400m/4/10A				
	Resistance: 400/4k/40k/400k/4M/40MΩ				
	Capacitance: 50n/500n/5μ/50μ/100μF				
	Frequency: 5/50/500/5k/50k/100kHz				
	Continuity: Buzzer sounds and LED lights up at between 0Ω and 85Ω (±45Ω) . Open voltage:Approx. 0.4V				
	Diode test: Open voltage:approx.1.5V				
	Battery Check: Approximate value (30Ω load) 1.5V battery only				
	Display numeral display: 4000				
	Sampling rate: 3 times/sec.				
	Bandwidth: 40~400Hz (Sine wave)				
	Fuse: 0.5A/1000V 30kA Φ6.35×32mm 10A/1000V 30kA Φ10×38mm				
	Battery: R6Px2				
	Battery life: Approx.400h (manganese battery) at DCV range Safety: IEC61010CAT. III 600V/CAT. II 1000VDCV: 400m/4/40/400/1000V				
	ACV: 4/40/400/1000V ±(1.2%+7)				
	DCA: 400μ/4000μ/40m/400m/4/10A				
	ACA: 400μ/4000μ/40m/400m/4/10A				
	Resistance: 400/4k/40k/400k/4M/40MΩ				
	Capacitance: 50n/500n/5μ/50μ/100μF				
	Frequency: 5/50/500/5k/50k/100kHz				
	Continuity: Buzzer sounds and LED lights up at between 0Ω and 85Ω (±45Ω) . Open voltage:Approx. 0.4V				
	Diode test: Open voltage:approx.1.5V				
	Battery Check: Approximate value (30Ω load) 1.5V battery only				
	Display numeral display: 4000				
	Sampling rate: 3 times/sec.				
	Bandwidth: 40~400Hz (Sine wave)				
	Fuse: 0.5A/1000V 30kA Φ6.35×32mm 10A/1000V 30kA Φ10×38mm				
	Battery: R6Px2				
	Battery life: Approx.400h (manganese battery) at DCV range Safety: IEC61010CAT. III 600V/CAT. II 1000V				
95	Electronics Tools and Instruments	lot	1	138,000.00	138,000.00
	Digital Multimeter -> 10 units				
	For measuring AC & DC current, resistance, capacitance, continuity, frequency, duty cycle and diode				
	Toolbox -> 2 units				
	Dimensions: 494 x 263 x 250 mm				
	With removable tote tray				
	Lineman Pliers Set -> 1 unit				
	3-pc Set of Insulated Chrome Vanadium Steel of:				
	Regular pliers, Long Nose pliers, and Diagonal Cutting pliers				
	Extra Long Nose Pliers Set -> 1 unit				
	1 pc. 0° Plier Length: 285mm/ 11.22inch.				
	1 pc. 45° Plier Length: 280mm/ 11..02inch.				



	1 pc. 90° Plier Length:265mm/ 10.43inch.				
	1 pc. O Shape Plier Length: 275mm/ 10.83inch.				
	Multi-functional automatic wire stripping pliers -> 1 unit				
	Self-adjusting Automatic Wire Stripper/Cutting Pliers for wire stripping, cutting, crimping, and installing TAB Terminal				
96	HAIER HSU-18NSV13(DC) Board	pc	1	4,000.00	4,000.00
	PCB NO.A 500201 - 100Q;				
97	Hard Drive (2 TB)	pc	1	3,000.00	3,000.00
98	Tablet 10.9", 64GB, Wifi + Cellular	unit	1	42,000.00	42,000.00
	☑64GB Storage Capacity				
	☑A14 Bionic chip with 64-bit architecture, Neural Engine				
	☑10.9-inch (diagonal) LED-backlit Multi-Touch display with IPS technology				
	☑2360-by-1640-pixel resolution at 264 pixels per inch (ppi)				
	☑Wide color display (P3)				
	☑True Tone display				
	☑Fingerprint-resistant oleophobic coating				
	☑Fully laminated display				
	☑Antireflective coating				
	☑12MP Wide camera				
	☑f/1.8 aperture				
	☑Five-element lens				
	☑Hybrid IR filter				
	☑4K video recording at 24 fps, 30 fps, or 60 fps				
	☑1080p HD video recording at 30 fps or 60 fps				
	☑Slo-mo video support for 1080p at 120 fps or 240 fps				
	☑7MP photos				
	☑f/2.2 aperture				
	☑1080p HD video recording at 60 fps				
	☑Wide color capture for photos and Live Photos				
	☑Smart HDR				
	☑Stereo speakers				
	☑Dual microphones for calls, video recording, and audio recording				
	☑802.11ax Wi-Fi 6; simultaneous dual band (2.4GHz and 5GHz); HT80 with MIMO				
	☑UMTS/HSPA/HSPA+/DC-HSDPA (850, 900, 1700/2100, 1900, 2100 MHz); GSM/EDGE (850, 900, 1800, 1900 MHz)				
	☑Gigabit-class LTE (Bands 1, 2, 3, 4, 5, 7, 8, 11, 12, 13, 14, 17, 18, 19, 20, 21, 25, 26, 29, 30, 34, 38, 39, 40, 41, 66, 71)4				
	☑Bluetooth 5.0 technology				
99	Temperature-Humidity Data Logger	pc	5	2,000.00	10,000.00
	☑Portable and hand-held				
	☑16000 data recording capacity.				
	☑Adjustable record interval: 10s~24hour				



	☑Multi-function LCD				
	☑Internal NTC temperature thermal sensor with optional external sensor				
	☑Data export in PDF/EXCEL via data management software				
	☑Selectable °F/°C temperature unit				
	☑Size: approx. 84 (L) x 44(W) x 20 (H) mm				
	☑Good quality				
	☑Durable				
100	UPS, Smart UPS, 2000VA	pc	1	35,000.00	35,000.00
	☑Max Configurable Power (Watts): 1.6kWatts / 2.0kVA				
	☑Output Voltage Note: Configurable for 220 : 230 or 240 nominal output voltage				
	☑Efficiency at Full Load: 88.0 %				
	☑Output Frequency (sync to mains): 50/60 Hz +/- 3 Hz Sync to mains				
	☑Other Output Voltages: 220 V, 240 V\				
	☑Load Crest Factor: 3 : 1				
	☑Topology: Double conversion online				
	☑Input frequency: 40 - 70 Hz				
	☑Input voltage range for main operations: 110 - 285 Adjustable (half load), 160 - 280V				
	☑Number of Power Cords: 1				
	☑Efficiency at Full Load: 88.0 %				
	☑Other Input Voltages: 220 V, 240 V				
	☑Waveform type: Sine wave				
	☑Bypass: Internal bypass (automatic and manual)				
	☑Battery type: Lead-acid battery				
	☑Typical recharge time: 4hour(s)				
	☑Battery Charge Power (Watts): 76 Watts				
	☑Interface Port(s): DB-9 RS-232, USB				
	☑Control panel: Multifunction LCD status and control console				
	☑Audible Alarm: Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm				
	☑Surge energy rating: 600Joules				
101	Various Electronic Components and Supplies	lot	1	59,500.00	59,500.00
	HDMI Cable -> 10 units				
	10 meters				
	830 breadboard set electronic component basic starter kit with breadboard cable resistor capacitor led potentiometer -> 20 units				
	1 power supply				
	1 830-point breadboard				
	65 pcs jumper wires				
	140 pcs solderless jumper wires				
	20 pcs female-to-male dupont wire				
	2 pcs pin header (40 pin)				
	1 precision potentiometer				
	2 photoresistors				



1 thermistor				
5 pcs rectifier diode (1N4007)				
5 pcs NPN transistor (PN2222)				
1 IC 4N35				
1 IC 74HC595				
1 active buzzer				
1 passive buzzer				
10 pcs button (small)				
10 pcs 22pF ceramic capacitor				
10 pcs 104 ceramic capacitor				
5 pcs electrolytic capacitor (10uF, 50V)				
5 pcs electrolytic capacitor (100uF, 50V)				
10 pcs white LED				
10 pcs yellow LED				
10 pcs blue LED				
10 pcs green LED				
10 pcs red LED				
10 pcs RGB LED				
10 pcs 10R resistor				
10 pcs 100R resistor				
10 pcs 220R resistor				
10 pcs 330R resistor				
10 pcs 1K resistor				
10 pcs 2K resistor				
10 pcs 5K1 resistor				
10 pcs 10K resistor				
10 pcs 10K resistor				
10 pcs 1M resistor				
Single-Sided Copper Clad Board FR4 With 35µm Copper Thick, 200 x 300 x 1.6mm -> 2 units				
PCB Developing Kit with Transfer Film -> 1 unit				
Non-Corrosive Soldering Paste (used for welding and desoldering) -> 1 unit				
Soldering Iron -> 6 units				
Mini Soldering Iron with Adjustable Temperature, 60W				
Soldering Iron Stand -> 6 units				
Stainless Steel spiral, 90mm long				
Desoldering Pump -> 2 units				
Replaceable and Self Cleaning tip				
Sealed vacuum chamber				
Microcontroller -> 10 units				
microcontroller board (ATmega328P based)				
14 digital inputs/outputs (six of which can be used as PWM outputs)				
six analog inputs				
has a 16MHz ceramic resonator				
has a USB-C connector				
has a reset button				
CIRCUIT OPERATING VOLTAGE: 5V				
INPUT VOLTAGE (LIMIT): 6-12V				
BATTERY CONNECTOR: None.				



	DC CURRENT PER: I/O PIN 20 mA				
	DC CURRENT FOR: 3.3V PIN 50 mA				
	MAIN PROCESSOR: ATmega328P 16 MHz				
	USB-SERIAL PROCESSOR: ATmega16U2 16 MHz				
	MEMORY: ATMEGA328P 2KB SRAM, 32KB FLASH, 1KB EEPROM				
102	Wifi Access Point (Existing fleet of VSU Access Points)	unit	1	12,000.00	12,000.00
	UAP-nanoHD				
	Dimensions: 160 x 160 x 32.65 mm (6.30 x 6.30 x 1.29")				
	Weight: 300 g (10.6 oz)				
	With Mounting Kits: 315 g (11.1 oz)				
	Networking Interface: (1) 10/100/1000 Ethernet Port				
	Buttons: Reset				
	Power Method: 802.3af PoE				
	Power Supply: UniFi Switch (PoE)				
	Power Save: Supported				
	Beamforming: Supported				
	Maximum Power Consumption: 10.5W				
	Supported Voltage Range: 44 to 57VDC				
	TX Power				
	2.4 GHz: 23 dBm				
	5 GHz: 26 dBm				
	MIMO				
	2.4 GHz: 2x2				
	5 GHz: 4x4				
	Radio Rates				
	2.4 GHz: 300 Mbps				
	5 GHz: 1733 Mbps				
	Antennas				
	2.4 GHz: (2) Single-Port, Single-Polarity Antennas, 2.8 dBi each				
	5 GHz: (2) Single-Port, Dual-Polarity Antennas, 3 dBi each				
	Wi-Fi Standards: 802.11 a/b/g/n/r/k/v/ac/ac-wave2				
	Wireless Security: WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES), 802.11w/PMF				
	BSSID: 8 per Radio				
	Mounting: Wall/Ceiling (Kits Included)				
	Operating Temperature: -10 to 70 C (14 to 158 F)				
	Operating Humidity: 5 to 95% Noncondensing				
	Certifications: CE, FCC, IC				
	Advanced Traffic Management				
	VLAN: 802.1Q				
	Advanced QoS: Per-User Rate Limiting				
	Guest Traffic Isolation: Supported				
	WMM: Voice, Video, Best Effort, and Background				
	Concurrent Clients: 200+				
	Supported Data Rates (Mbps)				
	Standard Data Rates				
	802.11a 6,9,12,18,24,36,48,54 Mbps				
	802.11n 6.5 Mbps to 300 Mbps (MCS0-MCS15, HT 20/40				



	802.11ac 6.5 Mbps to 1.7 Gbps (MCS0-MCS9 NSS1/2/3/4, VHT 20/40/80)				
	58 Mbps to 1.7 Gbps (MCS0-MCS9 NSS1/2, VHT 160)				
	802.11b 1, 2, 5.5, 11 Mbps				
	802.11g 6, 9, 12, 18, 24, 36, 48, 54 Mbps				
103	Large-Diaphragm Cardioid Condenser Microphone	unit	2	17,500.00	35,000.00
	For Voice, Instruments, Drums, and Cabs				
	<i>Cardioid Pattern Lessens Room Noise</i>				
	<i>Switchable -10 dB Pad Hinders Distortion</i>				
	<i>Low-Cut Filter Limits Bass Buildup</i>				
	<i>Shockmount Inhibits Vibration Noise</i>				
	<i>Large-Diaphragm True Condenser Capsule</i>				
	<i>Handles Immense Sound Pressure Levels</i>				
	<i>Includes Protective Case and Dust Cover</i>				
	<i>XLR Output for Hookup to Mic Preamp</i>				
	<i>Operates on 48V Phantom Power</i>				
	Microphone				
	<i>Form Factor: Large Diaphragm Mic / Stand/Boom Mount</i>				
	<i>Intended Sound Sources: Vocals, Speech/Voice Over, Instrument</i>				
	<i>Sound Field: Mono</i>				
	<i>Operating Principle: Pressure Gradient</i>				
	<i>Capsule: Condenser</i>				
	<i>Polar Pattern: Cardioid</i>				
	Performance				
	<i>Frequency Range: 20 Hz to 20 kHz</i>				
	<i>Maximum SPL: 145 dB SPL (1 kHz, 1% THD)</i>				
	<i>155 dB SPL (1 kHz, 1% THD, with Pad)</i>				
	<i>Impedance: 100 Ohms</i>				
	<i>Sensitivity: -32 dBV/Pa</i>				
	<i>Dynamic Range: 133 dB (1 kHz, at Max SPL)</i>				
	<i>Signal-to-Noise Ratio: 82 dB (1 kHz)</i>				
	<i>Equivalent Noise Level: 12 dB SPL A-Weighted</i>				
	Power				
	<i>Operating Voltage: 48 V (Phantom Power)</i>				
	<i>Operating Current Consumption: 4.2 mA</i>				
	Physical				
	<i>Color: Black</i>				
	<i>Mounting: Shockmount (Included)</i>				
	<i>Included Case: Hard Case, Mic Sock</i>				
	<i>Included Filters: None</i>				
	<i>Dimensions: ø: 2.1 x L: 6.69" / ø: 5.3 x L: 16.99 cm</i>				
	<i>Weight: 12.7 oz / 360 g</i>				
104	SDI to HDMI Converter Bidirectional	units	4	5,750.00	23,000.00
	<i>"Video Inputs: 1 x BNC (3G-SDI), 1 x HDMI (HDMI 2.0)</i>				
	<i>Audio Inputs: None</i>				
	<i>Video Outputs: 1 x BNC (3G-SDI), 1 x HDMI (HDMI 2.0)</i>				
	<i>Audio Outputs: None</i>				
	<i>Other I/O: 1 x USB-C Input</i>				
	<i>Expansion Slots: None</i>				
	<i>Embedded Audio: HDMI/SDI</i>				
	<i>Power I/O: 1 x USB-C (4.4 to 5.2 VDC) Input</i>				



	Power Consumption: 2.5 W"				
105	Headset, Over Ear, wired	sets	2	750.00	1,500.00
	☑Wearing Type: Over-ear				
	☑Microphone: Yes				
	☑Volume Control: Yes				
	☑One Key Mute Button: Yes				
	☑Microphone: Omnidirectional				
	☑Plug Type: 3.5mm				
	☑Speaker Diameter: 50mm				
	☑Receive Sensitivity: 101dB				
	☑Impedance: 32Ω				
	☑Frequency Response: 20-20kHz				
106	Speaker, for PC, 2.1 (Speaker with Subwoofer)	pc	1	1,500.00	1,500.00
	☑Power Output : rms 4.5w×2 sw: 12w				
	☑Signal to noise ratio : 80dba				
	☑Frequency Response : 80hz~20khz (±6db)				
	☑R/I: 300±50mv sw: 100 ± 20mv				
	☑Aux/USB/SD card				
	☑Bass driver :4 inch				
	☑Treble driver :2 3/4 inch				
107	Web Camera for Laptop and Desktop	pc	1	720.00	720.00
	☑About 360 degrees, rotate up and down 45 degrees, you can adjust the angle.				
	☑With clips for laptops and desktops.				
	☑Sensor pixels: 2 million				
	☑Interface: USB 2.0				
	☑Frame rate: 30 FPS				
	☑Image sensor: CMOS				
	☑Brightness/color: automatically adjusts				
	☑Additional features: built-in microphone				
108	System Unit (CPU), Core i7 8GB RAM	units	2	40,000.00	80,000.00
	CPU: 9th Gen Intel Core i7-9700 (8-Core, 12MB Cache, up to 4.7GHz with Intel Turbo Boost Technology) or higher				
	SDD: 256GB M.2 PCIe NVMe Solid State Drive or higher + 1TB 7200 rpm 3.5" SATA Hard Drive or higher				
	RAM: at least 8GB (8GBx1) DDR4 2666MHz or higher				
	Graphics: NVIDIA GeForce GTX 1650 4GB GDDR5 or higher				
	ATX casing with 700W PSU				
	With genuine Microsoft Office license.				
	OS: at least Windows 10				
109	VOIP Phone	units	2	10,000.00	20,000.00
	☑1-Line PoE+ SIP VOIP Phone SPA MAC address (IEEE 802.3) with lifetime warranty				
	☑IPv4 (RFC 791)Integrated web server provides web-based administration and configuration				
	☑Telephone keypad configuration via display menu/navigation				
	☑Automated provisioning and upgrade via HTTPS, HTTP, TFTP				
	☑Asynchronous notification of upgrade availability via NOTIFY				



	☐Nonintrusive in-service upgrades				
	☐Report generation and event logging				
	☐Statistics transmitted in BYE message				
	☐Syslog and debug server records: configurable per line				
	☐Address Resolution Protocol (ARP)				
	☐DNS: A record (RFC 1706), SRV record (RFC 2782)				
	☐Dynamic Host Configuration Protocol (DHCP) client (RFC 2131)				
	☐Internet Control Message Protocol (ICMP) (RFC 792)				
	☐TCP (RFC 793)				
	☐User Datagram Protocol (UDP) (RFC 768)				
	☐Real-Time Transport Protocol (RTP) (RFC 1889, 1890)				
	☐Real-Time Control Protocol (RTCP) (RFC 1889)				
	☐Differentiated Services (DiffServ) (RFC 2475)				
	☐Type of service (ToS) (RFC 791, 1349)				
	☐VLAN tagging 802.1p/Q: Layer 2 quality of service (QoS)				
	☐Simple Network Time Protocol (SNTP) (RFC 2030)SIP version 2 (RFC 3261, 3262, 3263, 3264)				
	☐SPCP with the Cisco Unified Communications 500 Series				
	☐SIP proxy redundancy: dynamic via DNS SRV, A records				
	☐Reregistration with primary SIP proxy server				
	☐SIP support in NAT networks (including STUN)				
	☐SIPFrag (RFC 3420)				
	☐Secure (encrypted) calling via SRTP				
	☐Codec name assignment				
	☐Voice algorithms:				
	☐G.711 (A-law and μ -law)				
	☐G.726 (16/24/32/40 kbps)				
	☐G.729 A				
	☐G.722				
	☐Dynamic payload support				
	☐Adjustable audio frames per packet				
	☐Dual-tone multifrequency (DTMF), in-band and out-of-band (RFC 2833) (SIP INFO)				
	☐Flexible dial plan support with interdigit timers				
	☐IP address/URI dialing support				
	☐Call progress tone generation				
	☐Jitter buffer: adaptive				
	☐Frame loss concealment				
	☐Comfort Noise Generation (CNG)				
	☐Voice activity detection (VAD) with silence suppression				
	☐Attenuation/gain adjustments				
	☐VMWI - Voicemail Waiting Indicator, via NOTIFY, SUBSCRIBE				
	☐Caller ID support (name and number)				
	☐Third-party call control (RFC 3725)				
	☐Should be compatible with existing fleet of VSU IP Phones				
110	Laptop Cooling Pad 14"	pcs	3	500.00	1,500.00
	1.one 14cm big LED light fan				
	2.metal mesh material				
	3. Powered by USB cable from laptop				



	4.Support size:12"-14"laptop				
	5.Color:black,				
111	Rechargeable Wireless Keyboard and Mouse Set	unit	3	950.00	2,850.00
	☑Rechargeable Office Wireless Keyboard and Mouse Set				
	☑Size: 284*121*16.mm				
	☑Weight: 280g				
	☑Connection method: USB receiver/Bluetooth				
	Rebidding - VSU-GOODS-23-35				
112	Coffee Maker Machine, Touch-Screen 10-cups Programmable with Glass Carafe, Stainless Steel	pc	1	2,300.00	2,300.00
113	Colored Digital Photocopier	unit	1	150,000.00	150,000.00
	Full color digital copier with network printing, color scanning and network fax				
	Copy and print speed of 30 copies per minute, A4				
	7-inch color touch screen panel				
	CPU: dual core 1.2 GHz				
	Paper size from A6R to Legal Size				
	Standard memory capacity is 1GB, max 3GB Plus 128GB SSD option				
	Paper capacity of 250 sheets cassette and 100 sheets multipurpose tray				
	Built-in 75-sheets reversing document processor and stackless duplex unit				
	Compatible with windows, macintosh and linux				
	Scan to SMB/E-mail/FTP/USB host/Box, Network Twain scan and WSDScan				
	Low power consumption Copying: 512w or less, Sleep mode: 0.6W				
	Super G3Fax, Stand-alone network connection				
	Maintenance Kit of 200,000 copies				
	With lifetime service				
114	Cordless Kettle	unit	30	1,200.00	36,000.00
	Electric Glass Kettle, Cordless				
	HWK-118GI				
	Power: 230V - 60Hz, 2000W				
	Capacity: 1.8L				
	360 degree rotary base, easy to use with high borosilicate glass body,				
	Durable and stain resistant blue LED light indication when boiling Concealed stainless steel				
	heating element Automatic one button cover starter boiling dry protection Automatically				
	turns off when water boiled.				
115	Stencil Digital Duplicator Machine	unit	1	100,000.00	100,000.00
	Print Speed: 60 - 90 Sheets Per Minute (2 Steps)				
	Resolution: 300 x 300 dpi				
	Printing Process: Fully Automatic One Drum Stencil System				
	Minimum Print Paper Size: 90 x 140 mm				
	Maximum Print Paper Size: 275 x 395 mm				
	Print Paper Weight: 35.0-127.9 g/m2				
	Print Area: Maximum 250 x 355 mm				



	First Print Speed: Less Than 40 Seconds				
	Features:				
	Auto background correction, auto cycle, photo/letter mode, tint mode, SP mode (for technical service use only), combine two originals, spot colour printing with optional colour drum units.				
	Options				
	USB controller printer unit type VC-20				
	Interface board type 20				
	Colour drum type 20 (B4)				
	Cabinet				
	Consumables				
	Priport™ master type (100 masters per roll, B4)				
	Priport™ black ink type (500 ml)				
	Digital Duplicator colour ink type II (600 ml): red, blue, yellow, green, purple,				
	navy, brown, maroon, orange, teal				
	CM ink (custom-made colours, 500 ml)				
	Specifications:				
	Image modes: Letter mode, Photo mode, Photo/Letter mode				
	Image position: Vertical: ±10 mm, Horizontal: ±10 mm				
	Reproduction ratios: Pre-set enlargement: 115, 122, Pre-set reduction: 71, 82, 87, 93%				
	Zoom: No				
	Colour printing: By replacing colour, drum				
	Paper feed/delivery table: 500 sheets (80 g/m ²)				
	Power source: 220-240 V, 50 – 60 Hz				
	Power consumption				
	Maximum: Master making: less than				
	175 W				
	Printing: Less than 175 W (at 90 sheets per minute)				
	Standby: 35 W				
	Dimensions (W x D x H): 1,232 x 672 x 519 mm				
	Weight: 55kg				
116	Microwave Oven, 20L	unit	4	5,000.00	20,000.00
	20-Liter				
	220V				
	Electronic Control				
	LCD Display				
	700w microwave power				
	6 autocook functions				
	Reheat and defrost capacity				
	Dimension: (h:w:d) 10.35 x 18 x 14 in				
	Warranty: One year on service, 2 years on parts				
117	Paper shredder machine, heavy duty	unit	1	12,000.00	12,000.00
	■Shred Type: Cross Cut				
	■Maximum Sheet capacity(70gsm) : 10 Sheets				
	■Waste Container capacity: 21 Liters				
	■Power Source: 220 - 240 VAC				
118	Washing Machine Heavy DutyWasher	unit	2	60,000.00	120,000.00
	15 kg. IEC Rated Capacity U.S Heavy Duty Washer				



	11 Wash Cycles				
	Quick Wash Cycle				
	Whites Cycle				
	Delicate Cycle				
	6th Sense Technology				
	Dual Action Agitator				
	Fabcon Dispenser				
	Liquid Bleach Dispenser				
	Mechanical Control panel				
	Deep Water Wash System				
	Soil Level Selection				
	Wash Temperature Selection				
	Load Size Selection				
	Extra Rinse Selection				
	Galvanized Heavy Duty Body				
	White Porcelain Tub				
	Child Lid Lock				
	Color: White				
	Dimension (h:w:d) 109.22 : 69:85 : 68.58 cm				
				TOTAL:	6,862,354.00

DILBERTO O. FERRAREN
BAC Chairman