



BID BULLETIN 01

Date: 30 November 2020

Project Title: Supply and Delivery of I.T. Equipment and Supplies for VSU Main (GOODS-20-56)

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) or a. Registration Certificate (SEC, DTI or CDA) b. Mayor's/Business Permit c. Tax Clearance
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 1,660,869.50) Or Statement of at least two (2) similar completed contracts w/ total amount of at least PhP 1,660,869.50 and the largest of which should be at least PhP 830,434.75.
4	Net Financial Contracting Capacity (at least PhP 3,321,739.00) Or Committed Line of Credit (at least PhP 332,173.90)
<i>Technical Documents</i>	
5	Bid Security
6	Technical Specifications
7	SCHEDULE of Requirements/Production and delivery schedule
8	Manpower Requirements
9	After Sales service/parts (at least 1 year from acceptance of delivered goods)
10	Original Duly Signed Omnibus Sworn Statement
<i>Financial Documents</i>	
11	The Supplier's Audited Financial Statements
(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:

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).

II. Preparation of Electronic Bid (for bidders who prefer electronic bid submission)

1. Convert all documents into Portable Document Format (PDF) and should be printable.
2. 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. Registration Certificate (SEC/DTI)	Registration Certificate
3. Mayor’s/Business Permit	Mayor’s-Business Permit
4. Tax Clearance	Tax Clearance
5. Statement of On-Going Government & Private Contracts	Statement of On-Going Contracts
6. Statement of Bidder's Single Largest Completed Contract	SLCC
7. Statement of at least two (2) similar completed contracts	Statement of Completed Contracts
8. Bid Security	Bid Security
9. Technical Specifications	Technical Specifications
10. SCHEDULE of Requirements/Production and delivery schedule	Schedule of Requirements
11. Manpower Requirements	Manpower Requirements
12. After Sales service/parts	After Sales
13. Omnibus Sworn Statement	Omnibus Sworn Statement
14. Audited Financial Statements	Audited Financial Statements
15. Net Financial Contracting Capacity	NFCC
16. Committed Line of Credit	CLC
17. Bid Form	Bid Form
18. Price Schedule	Price Schedule

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



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

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

III. Changes in the Bidding Documents

Original	Amendment
<p>5. A complete set of Bidding Documents may be acquired by interested Bidders on 17 November – 07 December until 1:59 PM from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Thousand Pesos (PhP 5,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.</p>	<p>5. A complete set of Bidding Documents may be acquired by interested Bidders on 17 November – 07 December until 1:00 PM from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Thousand Pesos (PhP 5,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.</p> <p>The Bidders may also deposit the applicable fee to Visayas State University Landbank Account:</p> <p>Account Name: Visayas State University Fund 164</p> <p>Account Number: 3572-1000-13</p> <p>And send the deposit slip to Ms. Jessamine C. Ecleo at jecleo@vsu.edu.ph</p>
<p>7. Bids must be duly received by the BAC Secretariat through (i) manual submission at the office address indicated below, (ii) online or electronic submission as indicated below, or (iii) both on or before 07 December 2020 until 2:00 PM. Late bids shall not be accepted</p>	<p>7. Bids must be duly received by the BAC Secretariat through (i) manual submission at the office address indicated below, (ii) online or electronic submission as indicated below, or (iii) both on or before 07 December 2020 until 1:00 PM. Late bids shall not be accepted</p>



IV. Revised List of Goods and Technical Specifications

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

Item No.	DESCRIPTION	Unit	Qty	ABC (Pesos)	Total ABC (Pesos)
1	3D Printer (2 sets)	lot	1	1,497,000.00	1,497,000.00
	"Technical Specifications:				-
	Layer Resolution: up to 20 microns				-
	Print Technology: FFF				-
	Filament Diameter: 2.85 mm [.1122 in]				-
	Print Head: Dual nozzle, with lifting mechanism on 2nd nozzle & Easily swappable Print Cores				-
	Print Head compatibility:				-
	AA Print Core - Build Material				-
	BB- Print Core - Support Material				-
	Extrusion Speed: up to 16 mm ³ /s				-
	Travel Speed: 30 - 300 mm/s				-
	Build Platform: Heated glass bed (maximum 100C)				-
	Bed Leveling: Active-leveling with capacitive sensor				-
	Nozzle Diameter: 0.4mm Print Core				-
	Build Volume: Left/Right Nozzle (single material): 21.5 x 21.5 x 20 cm				-
	Dual Material: 19.7 x 21.5 x 20 cm				-
	XY Positioning Precision: 12.5 microns				-
	Z Positioning Precision: 2.5 microns				-
	Included Accessories:				-
	• PLA 350g spool, PVA 350g spool				-
	• 2x AA printcore, 1x BB support material printcore				-
	• Spool holder				-
	• Filament guide				-
	• Glass buildplate				-
	• Glue stick				-
	• Power supply & cable				-
	• USB drive				-
	• Test print				-
	• Grease (for z-screw lubrication)				-



	• Sewing Machine Oil (for printhead rod lubrication)				-
	• Hex screwdriver				-
	Software: Ultimaker Cura (download)				-
	Supported File Types: STL, OBJ, 3MF				-
	Supported OS: Windows, Mac, Linux				-
	AC Input: 100-240V / 4A / 50-60HZ / 221w max.				-
	Power Requirements: 24 V DC @ 9.2 AMPS				-
	Supported Filament: PLA, PVA, ABS, CPE, CPE+, Nylon, PC, PP and more...				-
	*NFC system to automatically detects material type with official Ultimaker filament				-
	*Open filament system allows printing of 3rd party filament				-
	Connectivity: WiFi, Ethernet, standalone via USB-drive				-
	Camera: Yes				-
	Warranty: One-year manufacturer's warranty				-
	Printer Weight: 10.6 kg [23.32 lb]-delete				-
	Shipping Weight: 15.5 kg [34.1 lb] -delete				-
	Printer Dimensions (including Bowden tube/filament spool holder): 49.3 x 33.8 x 58.8 cm				-
	Shipping Dimensions: 61 x 48.2 x 45.7 cm. - delete				-
	Includes Pro-Service Plan , delivery, set-up, and installation"				-
	Polymaker Polywood Filament(Compatible with item no. 1), size: 2.85 mm (20 pcs)				-
	Black Tough PLA Filament (Compatible with item no. 1) , size: 2.85 mm (15 pcs)				-
	White Tough PLA Filament (Compatible with item no. 1) , size: 2.85 mm (15 pcs)				-
	Black PLA Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-



	Blue PLA Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Red PLA Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Yellow PLA Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	White PLA Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Silver PLA Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Black PLA plus Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Blue PLA plus Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Red PLA plus Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Yellow PLA plus Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	White PLA plus Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	Silver PLA plus Filament(Compatible with item no. 1), size: 2.85 mm (5 pcs)				-
	"Back-UPS (1100VA), 2 years warranty (3 units)				-
	Technical Specifications:				-
	• Output Capacity: 1100 VA/550 Watts				-
	• Output(On battery): 220-240V,50/60 Hz +- 1 Hz				-
	• Input Power: 220-240V nominal, 50/60 Hz +- 3 Hz(auto sensing)				-
	• Total # Outlets: 6 outlets				-
	• Surge Protection: AC utility line				-
	• Automatic Voltage Regulation: Boosts low voltages up to 21% Trims high voltages by 9%				-
	• Battery Recharge Time: 6 hours				-
	• Dimensions: 21.5 x 13.0 x 33.6 cm-delete				-
	• Weight: 9.2 kg"-delete				-



	Workstation with keyboard and mouse (2 units)				-
	Technical Specifications:				-
	Operating System				-
	• Windows 10 Pro				-
	Case and Motherboard				-
	• Vertical				-
	Processor				-
	• CPU Core: Ten-Core				-
	• CPU Type: Core i9				-
	• CPU Speed: 10900KF (3.7 Ghz)				-
	• Turbor boost speed: Up to 5.3 Ghz				-
	• Smart Cache: 20Mb				-
	• Front Side Bus: 8 Gt/s				-
	• CPU Socket: FCLGA1200				-
	CPU Main Features				-
	• Intel 64				-
	• Enhanced Intel Speedstep Technology				-
	• Intel VT-x with Extended Page Tables (EPT)				-
	• Intel Identity Protection Technology				-
	• Intel Secure Key				-
	• Intel Hyper-Threading Technology				-
	• Intel AES New Instructions				-
	• Intel Software Guard Extensions				-
	• Intel Optane Memory Supported				-
	• Intel Boot Guard				-
	• Intel Turbo Boost Technology 2.0				-
	• Intel Execute Disable Bit				-
	• Intel Thermal Monitoring Technologies				-
	• Intel OS Guard				-
	• Intel Thermal Velocity Boost				-
	Processor				-
	• Total Memory: 32GB				-
	• Memory Speed: DDR4-2933				-
	• Memory Slots (Total):4				-
	• Form Factor: 288-pin DIMM				-
	• Maximum Memory Supported: 64GB				-
	Solid State Drive(SSD)				-
	• SSD interface: PCIe NVMe M.2				-
	• SSD Capacity: 1 TB				-



	Video				-
	• GPU Type: NVIDIA GeForce RTX 2080 Ti				-
	• Video Memory: 11GB				-
	• VR Ready: Yes				-
	• GPU Interface: PCIe 3.0x16				-
	Communications				-
	• LAN Data Rate Speed: 10/100/1000/2500 Mbps				-
	Wireless Technology:				-
	• 802.11a				-
	• 802.11b				-
	• 802.11g				-
	• WiFi 5 (802.11ac)				-
	• WiFi 4 (802.11n)				-
	• WiFi 6 (802.11ax)				-
	Monitor				-
	• 27 inches				-
	• Resolution:1920 x 1080				-
	• Refresh Rate: 144Hz				-
	• Response time: 1 ms				-
	• Ports: HDMI, VGA				-
	• Frame Syncing: AMD FreeSync				-
	Lithium Polymer Battery 2150 MAH 11.1V Sensefly(Compatible to Fixwing Ebee Classic(Drone)) • Type2150mAh-Min.2150mAh- 24Wh (5 pcs)				-
2	Assembled DESKTOP COMPUTER SET	set	3	35,000.00	105,000.00
	Processor: Intel at least core i5 at least 10th Generation				-
	Licensed windows 10, SSD 500 GB, ITB HDD				-
	Memory: 8GB RAM DDR4,2400 DIMM Desktop Memory				-
	SSD: 500 GB				-
	Keyboard and Mouse Combo (USB Type)				-
	Casing with Power Supply 600w PSU				-
	Monitor: at least 20"				-
	UPS 650VA at most 4 hrs charging time, speaker				-
	& mouse pad				-



3	Computer Printer, Continuous Ink system 4in1(print, scan, photocopy, fax with ADF)	unit	1	27,000.00	27,000.00
4	Computer Printer: All-in-One Ink Tank Printer	set	1	8,000.00	8,000.00
	Compact integrated tank design; Print, copy, scan functions:				-
	Print speeds up to 15pm for black and 8.0ip for colour				-
	Auto-duplex printing Ethernet & Wi-Fi Direct				-
	Borderless Printing up to A4 size				-
	Spill-free ink refilling				-
	Compact integrated tank design				-
	Print speeds up to 15ipm for black & 8.0ipm for colour				-
	- Auto-duplex printing				-
	Ethernet & Wi-Fi Direct				-
	Borderless Printing up to A4 size				-
	Spill-free ink Refilling				-
	1 year warranty				-
5	Computer Set assembled with the following specs:	unit	1	30,000.00	30,000.00
	Micro processor: Core i5 at least 8th Gen				-
	RAM: 8GB				-
	Hardisk: 500GB SSD				-
	Motherboard: Socket 1151				-
	Monitor: at least 19"				-
	with USB Keyboard & USB Optical Mouse				-
	UPS, 600W				-
6	Duplicator Machine	pc	1	120,000.00	120,000.00
	Digital, desktop, fully-automatic one-drum stencil system				-
	sheet (one original sheet only)				-
	Original Size: Minimum: 90x140mm Max: 275x395mm				-
	Print paper size: Min: 90x140mm Max: 275x395mm				-
	print paper weight: 35.0127.9 g/m2				-
	Print Area: DX 2330: Max 210x355mm/DX 2430: Max 250 x 355mm				-
	Print Speed: 60-90 sheets per minute (2 steps)				-
	First print speed: Less than 45 seconds				-



	Resolution: 300x300 dpi				-
	Image modes: Letter mode, photo mode, photo/letter mode				-
	Image position: vertical: 10mm; horizontal: 10mm				-
	Reproduction ratios: pre-set enlargement: 115,122, 141%				-
	Pre-set reduction: 71,82,87, 93%				-
	Colour printing: By replacing colour drum				-
	Delivery table capacity: 500 sheets (80 g/m2)				-
	Power Source: 220-240V, 50-60 hz				-
	Power consumption: Max: master making: less than 175W				-
	Printing: less than 175w (at 90 sheets per minute)				-
	Standby: 35W				-
	Dimensions (WxDxH): 1,232 x 672 x 519mm-delete				-
	Weight: 55kg-delete				-
7	External Drive	units	3	3,000.00	9,000.00
	• 1TB Storage Capacity				-
	• USB 3.0 Connectivity				-
	• Bus Powered				-
	• Plug-and-Play Compatible				-
	• USB 3.0 Cable Included				-
	• Preformatted for Windows				-
	• Mac Compatible with Reformatting				-
8	Full HD 1080P 2 Megapixels Webcam 90° Wide-Angle	pc	1	1,500.00	1,500.00
	☑with Built-in Noise Cancelling Microphone Pan & Tilt Rotation				-
	☑USB Plug and Play				-
	☑Live Streaming Video				-
	☑Conference Webcam for PC/Laptop				-
9	LAPTOP	unit	1	60,000.00	60,000.00
	☑Intel Core i7 10 th Gen or higher				-
	Quad Core, 1.8GHz Clock Speed-delete				-
	☑8GB RAM				-
	☑512 GB SSD Hard Disk				-
	☑Intel UHD Graphics 620				-
	☑13.3", 1920 x 1080 pixels				-
	☑Windows 10 Home/ Pro, OS				-



10	LAPTOP 14" i7	set	2	60,000.00	120,000.00
	Processor: at lest Ontel Core i7- 1065G7 (1.3/3.9GHz, 8MB				-
	Graphics" NVIDIA GeForce MX250 at least 2GBGDDRS				-
	Memory: at least 8GB DDR4-2666				-
	Storage: 256GB SSD M.2 + 1TB HDD				-
	Display: 14" FHD (1920x1080) TN 220nits Anti-glaire				-
	Touchscreen:Nonw, Optical: None				-
	Media Reader: 4 in 1 Card Reader, Ethernet: None				-
	WLAN + Bluetooth, Camera: at least 720p				-
	Microphone:2x, Array				-
	Operating System:Windows 10 Home				-
	FREE: Backpack and 1 yr Warranty				-
11	Laptop Computer, with IPS display	unit	1	60,000.00	60,000.00
	Laptop Type: Notebook				-
	CPU: Core i7				-
	Processor Model: i7-7500U-delete at least 10 th Generation-added				-
	Processor Speed: at least 2.7 GHz				-
	CPU Cache: at least 4 MB L3 Cache				-
	Turbo boost Speed: at least 3.5 GHz				-
	Chipset: Intel				-
	GPU Model: Intel HD Graphics 620				-
	RAM: at least 8GB				-
	Memory Type: DDR3L-delete, DDR4				-
	Memory Speed: at least 2666MHz				-
	Storage Type: SSD at least 500gb				-
	Battery: Lithium Ion				-
	Free carrying case warranty				-
12	License Microsoft Office 2019	unit	1	7,500.00	7,500.00
13	License Windows 10 Home	unit	1	10,000.00	10,000.00
14	Netbook computer, 6550b core i5 built-in camera 15.6 inch monitor computer memory 5G hard disk 500G business office learning online notebook-delete 14 inch, Intel Celeron N4000 Processor, 4GB RAM, 128GB SSD), 1 Year Warranty-added	unit	1	14,999.00	14,999.00
15	Printer, Laser Jet	unit	2	7,500.00	15,000.00



16	Printer/Scanner/copier with the following	unit	2	14,990.00	29,980.00
	Specification:				-
	Max Resolution 5760 x 1440dpi				-
	Minimum Ink Droplet Volume; 3pl				-
	High Yield Ink Bottles				-
	Print Speed up to 33ppm (9.2ipm)				-
	Fax and ADF Capability				-
	Ethernet & Wifi Direct-delete				-
17	Uninterruptible Power Supply (UPS)	unit	1	4,000.00	4,000.00
	• Output power capacity : 450Watts /800VA				-
	• Max Configurable Power (Watts) : 450Watts /800VA				-
	• Nominal Output Voltage : 230V				-
	• Output Frequency (not synced) : 50/60 Hz +/-1 Hz				-
	• Topology : Line Interactive				-
	• Waveform type : Stepped approximation to a sinewave				-
	• Transfer Time : 6ms typical : 10ms maximum				-
	• Nominal Input Voltage : 230V				-
	• Input frequency : 50/60 Hz +/- 5 Hz (auto sensing)				-
	• Input Connections : IEC-320 C14				-
	• • Cord Length : at least 1.5 meters				-
	• Battery type : Maintenance-free sealed Lead-Acid battery with suspended electrolyte : leakproof				-
	• Expected Battery Life (years) : 3 - 5				-
	• Control panel : LED Status display with On Line : On Battery				-
	• Audible Alarm : Alarm when on battery : distinctive low battery alarm : overload continuous tone alarm				-
	• Operating Temperature : 0 - 40 °C				-
	• Operating Relative Humidity : 0 - 90 %				-
	• Operating Elevation : 0-1968.3meters				-
	• Audible noise at 1 meter from surface of unit : 40.0dBA				-
18	Uninterruptible Power Supply, UPS, 650 VA, 230 Volts, at most 4 hours charging time.	unit	3	3,333.33	10,000.00



19	WEB Camera with Microphone (1080p compatible with Windows and MacOS)	unit	1	8,000.00	8,000.00
	Technical specifications:				-
	Maximum resolution: 1080p/30fps - 720p/30fps				-
	Focus type: autofocus				-
	Built-in microphone: stereo				-
	Can connect tripod general installation clip, suitable for laptop, LCD or monitor				-
	Cable length: 1.5 m				-
	System requirements:				-
	For: Windows 10 or later, Windows 8, Windows 7				-
	Video calling client can be used in USB video (UVC) mode:				-
	MacOS 10.10 or later				-
	Chrome OS				-
	Android v 5.0 or higher				-
	USB port				-
	The network connection				-
	For accurate information on system and performance requirements, visit the web site of your favorite video calling solution provider.				-
	Platform compatibility: support for Skype, Google Hangouts for Mac				-
	Weight (g) and size (mm)-delete				-
	Line length: 1.5 m-delete				-
	Size: 29 x94x24mm-delete				-
20	Wireless and Wired Bluetooth over ear powerful bass headphones with mic	pc	1	1,500.00	1,500.00
21	Portable External SSD, 1TB	pc	1	8,000.00	8,000.00
	Specifications:				-
	Capacity: 1TB				-
	Interface: USB 3.0 or USB 3.1 Gen 2 Support				-
	Compatibility:				-
	MAC OS 10.13+				-
	Windows 10 (install compatibility software)				-
	Formatted for PC and MAC computers, with included automatic backup software for windows and compatibility for time machine (reformatting required)				-



	Pocket-sized drive with an integrated cable				-
	Delivers SSD Performance of up to 300MB/s				-
22	Computer Printer: All-in-One Ink Tank Printer	set	2	8,000.00	16,000.00
	Compact integrated tank design; Print, copy, scan functions:				-
	Print speeds up to 15pm for black and 8.0ip for colour				-
	Auto-duplex printing Ethernet & Wi-Fi Direct				-
	Borderless Printing up to A4 size				-
	Spill-free ink refilling				-
	Compact integrated tank design				-
	Print speeds up to 15ipm for black & 8.0ipm for colour				-
	- Auto-duplex printing				-
	Ethernet & Wi-Fi Direct				-
	Borderless Printing up to A4 size				-
	Spill-free ink Refilling				-
	1 year warranty				-
23	License Windows 10 Home	unit	2	10,000.00	20,000.00
24	License Microsoft Office 2019	unit	2	7,500.00	15,000.00
25	UPS, at least 800 watts, good quality	pc	2	4,950.00	9,900.00
26	Printer, Ink Tank System, 3n1 (Print, scan, copy)	set	2	9,000.00	18,000.00
	REBIDDING				
27	Adobe Creative Cloud-All apps Prepaid, 1 year license	licen se	5	25,000.00	125,000.00
28	All-in-one WiFi duplex inkjet printer	pc	1	15,000.00	15,000.00
	Specifications:				-
	Functions: Print, Scan, Copy				-
	Ethernet & Wi-Fi Direct				-
	Print speeds up to 15ipm for black and 8.0ipm for colour				-
	Auto-duplex printing				-
	Borderless Printing up to A4 size				-
29	All-in-one Printer (Print, Scan, Copy) Ink tank system	set	1	8,000.00	8,000.00
	Specifications:				-
	- Features: Multi-function Inkjet Printer, color print (Black, Refillable Ink Tank)				-
	- Printing Type: Colour				-
	- Printing Technology: Inkjet				-



	- Scanner Type: Flatbed				-
	- Print Resolution: 5760x1440 DPI Print Speed Black: 33 PPM Print Speed Colour: 15 PPM Paper Size: 10x15cm(4x6in), 13x18cm(5x7in), 9x13cm(3.5x5in), A4, A5, A6, B5, Letter(8 1/2x11in) Scanning Method: CIS Network: USB 2.0 Color: Black Paper Tray: 100 Sheets Warranty: 1 Year(s) Printer Type: Multifunction				
30	Cisco VOIP Phone , SPA 502G (Must be the same fleet of existing VSU VOIP), POE	units	1	7,000.00	7,000.00
31	Computer Printer	units	5	5,000.00	25,000.00
	with USB support, printer speed (CPM):at least 30ppm & up				-
	printer function type:photo printer				-
	printer connectivity type: USB				-
	1 x Printer w/CISS set up ready(4 color external tanks				-
	filled w/4 color premium dye inks 1 x 100ml				-
	(black, cyan, magenta, yellow)				-
	Plus 1 set premium dye ink				-
32	Data Cabinet 10U , ISO certified, top fan, polycarbonate front, surge protection, easy access. Supplier must provide complete Datasheets.	units	4	10,000.00	40,000.00
33	Data Cabinet , 10U, with 2-Fan, surge protect power strip, can open front and sides cover with keys. Flexiglass front, ISO standard, durable metal frame.	unit	1	12,000.00	12,000.00
34	DOCUMENT SCANNER (Flat Bed)	unit	1	30,000.00	30,000.00
	General				-
	Type Documents - desktop scanner				-
	Interface type USB 3.0				-
	Size Max. documents that support 216 x 3100 mm				-
	Location English, German, French, Italian, Spanish / Europe				-
	Scanner				-
	Input type Color				-
	Grayscale depth 8-bit (256 grey levels)				-



	Color depth 24-bit (16.7 million colors)				-
	Optical resolution 1200 dpi x 1200 dpi				-
	Scan mode Single-pass				-
	To two sides automatic Yes				-
	Scan element type CMOS / CIS				-
	Type of lamp / light source LED				-
	Maximum speed of scanning of documents in b & w 25 ppm				-
	Maximum speed of scanning color documents 25 ppm				-
	Functions of the buttons on the control panel Explore, cancel, duplex, tools				-
	Duty cycle 3000 scans per day				-
	Speed of scanner data 25 ppm - 300 DPI 50 ipm - duplex - 300 dpi (front) / 300 dpi (back)				-
	Scanner functions Integrated LCD screen				-
	Compliance TWAIN, WIA				-
	Media management				-
	Maximum size of documents 216 mm x 3100 mm				-
	Type of document that supports Plain paper, plastic tags, photo, card on				-
	Details of the size of the documents that support ADF - up to 216 x 3100 mm flat - up to 216 x 297 mm				-
	Document feeder type Automatic				-
	Storage of documents 50 sheets				-
	Expansion / connectivity				-
	Interfaces USB 3.0				-
	Different				-
	Cables included 1 x USB cable				-
	Compatible with Windows 7 Applications and devices "Compatible with Windows 7" are assurance of Microsoft that these products were subjected to tests for compatibility and reliability with 32-bit and 64-bit Windows 7.				-



	Compliance CISPR 24, c-Tick, BSMI, cUL, EN 61000-3-2, EN55022, ICES-003, SASO, EN 61000-3-3, CISPR 22, CCC, EMC, RoHS, IEC 60950-1, EN 60950-1, UL 60950-1 Second Edition, KCC, BSMI CNS 13438, FCC CFR47 Part 15 B, CSA C22.2 No. 60950-1 Second Edition, KN22, EAC, TER, PVOC, CoC				-
	Environmental standards				-
	ENERGY STAR certification Yes				-
	Power				-
	Feeding device External electric transformer				-
	Voltage required AC 120/230 V (50/60 Hz)				-
	Power consumption standby 4.51 Watts				-
	Stop power consumption 1.4 Watts				-
	Software / system requirements				-
	Software included Readiris Pro, Cardiris, Nuance PaperPort, HP Scan HP Scanner Tools Utility				-
	OS required Microsoft Windows 7 (32/64 bits), Windows 8 (32/64 bits), Windows 8.1 (32/64 bits), Apple MacOS X 10.9, Apple MacOS X 10.10, 10 Windows (32/64 bit)				-
	Details of the system requirements Windows 7/8/8.1/10 - 2 GHz - RAM 2 GB - HD 170 MB MacOS X 10.9/10.10 - 1 GB RAM				-
	Dimensions and weight-delete				-
	Width 46 cm-delete				-
	Depth 38.7 cm-delete				-
	Height 14.5 cm-delete				-
	Weight 5.58 kg-delete				-
	Dimensions and weight (packing) -delete				-
	Width of packing 57.9 cm-delete				-
	Packaging depth 49.9 cm-delete				-
	Height of packing 24.5 cm-delete				-
	Packing weight 7.6 kg-delete				-
	Environment parameters				-
	Minimum operating temperature 10 ° C				-



	Maximum operating temperature 35 ° C				-
	Operating humidity range 15 80% (non-condensing)				-
35	LAPTOP	unit	1	35,000.00	35,000.00
	Display Size: 15.6"				-
	Resolution: HD (at least 1366 X 768) FHD (at least 1920 X 1080)				-
	Panel Type: Anti Glare LED Backlit Display				-
	CPU: CORE i3 or higher				-
	Processor Model: 10 th Generation Intel Core i3- or higher				-
	Chipset Integrated with the Processor				-
	GPU Model: Intel HD Graphics 520 with shared graphics Memory				-
	Intel HD Graphics 630 with shared graphic memory				-
	Discrete: Graphics with 2GB DDR3-delete				-
	RAM: at least 8GB				-
	Memory Type DDR4				-
	4GB Memory Slots two Sodium Slots-delete				-
	Storage Type: 240GB SSD				-
	Optical Drive Built-in DVD-RW				-
	Connectivity HDMI				-
	USB3.1, OS Windows 10, Ubuntu, OS Ver-delete licensed Windows 10 Home				-
	Battery 40WHr (4 cell) battery (removable) 45 watt AC Adapter (w/ standard graphics)				-
	65 watt AC Adapter (w/ discrete graphics option)				-
36	LAPTOP	unit	1	26,000.00	26,000.00
	Operating System: Windows 10 Home				-
	Processor: Intel Core i3- 7020U-delete at least 8th generation-added Processor (3M Cache, 2.30 GHz)				-
	Memory: 4GB DDR4, up to 16GB (maximum)				-
	Card Reader: SD Card				-
	Storage: 1TB Hard Drive				-
	Screen: at least 14" HD LED Display				-
	Optical Drive: NO ODD				-
	Graphics: Integrated Graphics				-
	Connectivity: 802.11 AC Wireless LAN Gigabit LAN				-



	Audio & Video: 640 x 480 Webcam Digital Microphone 1 x Speaker 300 kilopixel (Front Camera)				-
	Ports & Connectors: 1 x USB 3.0, 2x USB 2.0, Network (RJ-45), HDMI Output				-
	Input Devices: Touch Pad, Non- backlit Keyboard				-
	Battery: 2-Cell 4810 mAh Li-Polymer				-
	Package Contents: Laptop, Lithium Polymer Battery, AC Adapter				-
37	Laptop	unit	1	40,000.00	40,000.00
	Intel Core i5-1035G1-Delete at least 10 th Generation Processor 1.0 GHz 6M Cache, up to 3.60 GHz				-
	Windows 10 Home				-
	4GB onboard memory 1xS0-DIMM socket (for expansion)				-
	14" (16.9) LED-backlight FHD (1920x1080) 60Hz anti-glare panel with 45% NTSc				-
	NVIDIA Geforce MX330, with 2gb GCCRS VRAM				-
	256 GB Pcle Gen3x2 SSD				-
38	LAPTOP	unit	1	32,000.00	32,000.00
	Operating System: Windows 10 Home				-
	Processor: at least Intel Core i3-7020U at least 10 th Generation Processor (3M Cache, 2.30 GHz)				-
	Memory: at least 8GB DDR4, up to 16GB (maximum)				-
	Card Reader: SD Card				-
	Storage: at least 256 GB SSD				-
	Screen: 15.6" HD LED Display				-
	Optical Drive: NO ODD				-
	Graphics: Integrated Graphics				-
	Connectivity: 802.11 AC Wireless LAN Gigabit LAN				-
	Audio & Video: 640 x 480 Webcam Digital Microphone 1 x Speaker 300 kilopixel (Front Camera)				-
	Ports & Connectors: 1 x USB 3.0, 2x USB 2.0, Network (RJ-45), HDMI Output				-
	Input Devices: Touch Pad, Non- backlit Keyboard				-



	Battery: 2-Cell 4810 mAh Li-Polymer				-
	Package Contents: Laptop, Lithium Polymer Battery, AC Adapter				-
39	LAPTOP	unit	2	51,000.00	102,000.00
	Processor: Intel Core™ i7 7500U at least 10th Generation Processor				-
	Operating System: Licensed Windows 10 Home				-
	Memory: at least 8GB SDRAM				-
	Display: at least 15.6" (16:9) LED Backlit fhd (1920 x 1080) 60Hz Anti-Glare Panel with 72% NTSC with 178° wide viewing angle display 15.6" (16:9) LED backlit HD				-
	Graphic: NVIDIA GeForce MX150, with 2gb GDDR5 VRAM				-
	Storage: Hard Drives: at least 1TB 5400RPM SATA HDD; Solid State Driver: at least 128GB SATA3 M.2 SSD				-
	Keyboard: Chiclet Keyboard/Illuminated Chiclet; Keyboard (on selected models)				-
	Card Reader: Multi-Format card reader (SD/SDHC)				-
	WebCam - VGA Web Camera *1				-
	Networking				-
	Wifi				-
	Integrated 802.11 AC (2x2)				-
	Bluetooth				-
	Built in Bluetooth V4.1				-
	Interface				-
	1 x Microphone-in Headphone-out jack				-
	1 x Type C USB 3.0 (USB3.1 GEN1)				-
	1 X USB 3.0 Port(s)				-
	1 X USB 2.0 Port(s)				-
	1 x HDMI, Support HDMI				-
	1 x Fingerprint (On selected models)				-
	*1 year Warranty				-
40	LAPTOP- Brand New and Branded	unit	1	86,700.00	86,700.00
	CPU: at least Processor i7-9750H				-
	OPERATING SYSTEM: Windows 10 Pro				-
	RAM: 32GB (Upgradable to 64GB)				-
	HARD DRIVE: Primary 512 GB (M.2 PCIe NVMe Class 40 SSD)				-



	DISPLAY SIZE: 17.3"				-
	HIGHEST RESOLUTION: 3840 x 2160, Native				-
	RESOLUTION: 3840 x 2160				-
	GRAPHIC CARD: Nvidia Quadro P5200				-
	VIDEO MEMORY: 16GB				-
	WIFI: 802.11ac				-
	WIFI MODEL: Intel Dual Band Wireless AC 9260				-
	BLUETOOTH: Bluetooth 5.0				-
	TOUCHPAD SIZE: 3.9" x 2.1"				-
	PORTS:				-
	1. Headphone/Mic				-
	2. Thunderbolt 3				-
	3. HDMI 2.0				-
	4. Smart Card Reader				-
	5. Finger Print Scanner				-
	6. SD Card Slot				-
	7. Ethernet				-
	8. Lock Slot				-
	9. IR				-
	10. USB 3.1 GEN1				-
	11. USB 2.0 (5 slots)				-
	CARD SLOTS: SD/SDHC Card Reader				-
	Brand New and Branded				
	WARRANTY SUPPORT: 3-Year Warranty				-
41	Monitor, 23" LED monitor, with VGA & HDMI input	units	2	6,000.00	12,000.00
42	NETBOOK	unit	1	14,000.00	14,000.00
	at most 11.6" display				-
	Intel Celeron				-
	Memory: at least 2GB RAM				-
	Storage: at least 500GB HDD				-
	OS: Windows 10-delete				-
43	Outdoor Portable Speaker, Wireless w/ wireless microphone, at least 300 watts, 15"	units	2	15,000.00	30,000.00
44	Printer - Ink Tank System All-in- One Functions. Print, Scan, Copy 3 pi, with variable-sized droplet technology Dye Ink, 5760x1440 dpi, 180 nozzle black 59 per color (1 unit)	lot	1	9,660.00	9,660.00



	Ink refill 70 ml (4 colors per set: Cyan, Magenta, Yellow, Black, same brand with the printer) 2 sets				-
45	PRINTER, 3 in 1, Continuous Ink Supply System, Precision Core Printhead, 400 nozzle black, 128 nozzle per colour, 3.3pl with variable-sized droplet technology, dye ink, bi-directional printing, uni- directional printing, 4,800x1,200 dpi, Print, Scan, Copy, Fax,	unit	1	18,000.00	18,000.00
	Print Speed: 13.7ipm black/7.3ipm color,				-
	Best Print Speed: 6.5ipm black/4.5ipm color,				-
	Photo Print Speed (10cmx15cm): 69 sec per photo with border, Automatic 2 sided printing,				-
	Copy Speed: 11 sec black/5.5ipm color,				-
	Copy Quality: Normal/Best, Up to 99 max copies, 25-400% Auto Fit Function, Max				-
	Copy Size: A4, Letter, Legal,				-
	Scanner Type: Flatbed/ADF, Sensor: CIS,				-
	Copy Resolution: 600x600 dpi,				-
	Optical Resolution: 1,200 x 2,400 dpi, 48 bit input/24 bit output color, 16 bit input/8 bit output grayscale, 16 bit input/1 bit output black,				-
	Print Margin: 3mm top/left/right/bottom,				-
	Interface: USB 2.0, Ethernet, 802.11b/g/n, Wi-fi Direct, Mobile and Cloud Printing, 2.2" Mono LCD Screen, Mac OS 10.7.x/10.8.x/10.9.x/X 10.6.8 or later, Windows 7/7 x64/8/8 (32/64 bit)/8.1/8.1 x64 Edition/Vista/Vista x64/XP x64/XP Professional x64 Edition,				-
	Rated Voltage: AC 220-240V;				-
	Rated Frequency: 50-60Hz, Power Consumption Operating: 11W; Standby: 4.4W; Sleep: 1.5W;				-



	Power Off: .3W, Noise Level 5.9B (A), 46dB (A)- PC Printing / Premium Glossy Photo Paper Best 6.4B (A), 50dB(A)- PC Printing / Plain Paper default,				-
46	Printer, 3-in-1 (Print, Scan & Copy)	unit	1	8,500.00	8,500.00
	Compact integrated tank design; print, copy, scan functions				-
	Print speeds up to 15pm for black and 8.0ip for colour				-
	Borderless Printing up to A4 Size				-
	Spill free ink refilling				-
	Compact integrated tank design				-
	Print speeds up to 15ipm for black & 8.0ipm for colour				-
	Auto-duplex printing				-
	Ethernet & wif-fi direct				-
	Borderless Printing up to A4 size				-
	Spill-free ink refilling				-
	1 year warranty				-
47	Printer, 3-in-1 (Print, Scan & Copy)	unit	2	8,500.00	17,000.00
	5,760 x 1440DPI				-
	15 pages per min printing speed				-
48	Printer, All-in-One , Ink Tank, with ADF	unit	1	17,000.00	17,000.00
49	PRINTER , Multi Function with Continuous Ink System (Print, Scan, Copy)	unit	1	10,000.00	10,000.00
	5,760 x 1440DPI				-
	15 pages per min printing speed				-
50	Printer, Print, Scan & Copy, will aslo print vellum board type of paper ISO Standard	unit	1	8,500.00	8,500.00
	☐Printer Speed (A4): up to 8.8ipm (mono)/5.0ipm (colour)				-
	☐Photo Speed (4 x 6"): 60 sec. (borderless)				-
	☐Maximum Printing Resolution: 4800 (Horizontal) 1 x 1200				-
	☐Print head/ink				-
	☐Number of Nozzles: total of 1472 nozzles				-
	☐Ink bottles: GI-790 (black, cyan, magenta, yellow)				-



	☐Borderless Printing: Top/Bottom/Right/Left Margin each				-
	☐Bordered Printing: Top Margin: 3mm, bottom margin: 5mm				-
	☐Plain Paper: A4, A5, B5, Letter= 100, legal =10, High				-
	☐A4, letter = 80, Photo Paper Plus Glossy II (PP-201)				-
	☐A4, letter = 10, 4x6" = 20.5				-
51	Printer, Refillable Ink Tank Wireless	pc	1	13,000.00	13,000.00
52	PRINTER , Wifi Duplex All-in-one	pcs	2	14,500.00	29,000.00
	Print speeds up to 15ipm for black and 8.0ipm for colour				-
	Auto Duplex Printing				-
	Ethernet & Wifi Direct				-
	Borderless Printing up to A4 size				-
	Spill-free ink refilling				-
	1.4 refilling				-
	1.4 inch colour LCD panel				-
	Bi-Directional Printing				-
	Uni-Directional Printing				-
	400 nozzles Black				-
	128 nozzles per colour (Cyan, Magenta, Yellow)				-
	4800 x 1200 dpi (with Variable- sized Droplet Technology)				-
	copy resolution 600 x 1200 dpi				-
53	Professional Wireless receiving unit with 2-pcs with professional wireless microphone (lapel) with two handheld wireless microphone with cable convertible. G frequency range 566-608Mhz	set	2	20,000.00	40,000.00
54	Two Way Radio Pair	pc	3	40,000.00	120,000.00
	Band: UHF (Bandwidth Range: Either 12.5kHz or 25kHz)				-
	Output Power: 2000mW				-
	16 Channels				-
	at least 350,000 sq ft range				-
	" 89 UHF business-exclusive frequencies and 121 interference eliminator codes				-
	Frequency Range: 435MHZ - 480MHz "				-
	with NTC License*				-



55	UNDERWATER CAMERA (RED OR BLUE)	units	2	28,000.00	56,000.00
	USB cable, hand strap, instruction manual, warranty card,				-
	LI-92B Lithium Ion Rechargeable battery, F-5AC USB-AC				-
	Adapter				-
	PRODUCT TYPE				-
	Memory: SD, SDHC[1], SDXC[1]				-
	* 1 UHS-I compatible				-
	IMAGE SENSOR				-
	Product type: 1/2.33 inch				-
	Number of pixels: Number of effective pixels: 12 million pixels				-
	Total number of pixels: Approx. 12.7 million pixels				-
	Aspect ratio: 1.33 (4:3)				-
	LENS				-
	Structure: 9 lens elements in 7 groups				-
	Focal length (equiv. 35mm): 4.5mm -18.0mm (25mm - 100mm)				-
	Maximum aperture: f/2.0 (wide- end) to f/4.9 (tele-end)				-
	Optical zoom: 4x				-
	Shooting range (from lens tip): Throughout entire zoom range: 0.1m - infinite (Super macro: less than f=5.4mm, from 0.1m to 0.3m / above 5.4mm, from 0.01m to 0.3m / Microscope: 0.01m - 0.30m)				-
	STILL PHOTO RECORDING				-
	Recording format: DCF2.0, Exif2.3				-
	File format: RAW (12-bit lossless compression), JPEG, RAW + JPEG				-
	Recording image size: [RAW] 4000 x 3000				-
	[JPEG] 4000 x 3000 - 1280 x 960				-
	IMAGE STABILISATION SYSTEM				-
	Type: Still image: CMOS shift				-
	Mode: On / Off				-
	Stabilisation performance: 2.5 EV[*] (Focal length set to 18 mm. 35 mm Equivalent Focal Length: 100 mm)				-



	*Based on CIPA measurement conditions.				-
	LIVE VIEW				-
	Live View: Approx. 100% field of view, Exposure compensation preview, WB adjustment preview, Gradation preview, Face detection preview (up to 8 faces), Grid line, display modes: Standard, Histogram, Highlight & Shadow, Level Gauge, Off				-
	MONITOR				-
	Monitor type: 3.0-inch colour LCD[*]				-
	*Approx. 1040K dots (Aspect ratio: 3 : 2)				-
	Brightness control: ± 7 levels				-
	FOCUSING				-
	AF system: CMOS Contrast Detection (with AF Illuminator)				-
	Focusing point / Focusing point selection mode: 25 point / All target, single target				-
	Focus mode: Single AF (S-AF) / AF tracking / Manual Focus (MF) / Super macro (AF) / Super macro (MF)				-
	Face detection AF: With				-
	Manual focus assist: Live View image magnification and focus peaking are available during manual focus operations.				-
	Peaking function: With				-
	*Colour selection: white, black, red, yellow				-
	AF illuminator: With				-
	EXPOSURE CONTROL (STILL)				-
	Metering system (TTL Image sensor metering): Digital ESP metering / spot metering				-
	Metering range: EV 2-20 (f/2.0 / ISO 100)				-



	Exposure mode / Shooting mode: Intelligent Auto (iAUTO), Program Auto (P), Aperture Priority (A), Custom1, Custom2, Underwater (Snap, Wide, Macro, Microscope, HDR), Microscope (Microscope, Focus stacking, Focus bracket, Microscope control), Scene Mode (SCN), Movie				-
	Scene select AE: Portrait, e-Portrait, Landscape, Portrait +Landscape, Hand-held Starlight[*], Nightscape, Portrait + Nightscape, Children , Sport , Candlelight, Sunset, Fireworks, Beach & Snow, Panorama, Live Composite, Backlight HDR				-
	*6 images automatically shot and combined into a single composite image				-
	ISO sensitivity: AUTO ISO: 100 - 1600 with customisable upper limit from 100 to 12800				-
	Manual ISO: 100 - 12800 (1/3 EV step)				-
	Exposure compensation: ± 2 EV (1/3 EV step)				-
	AE lock: Locks with a half-press of the shutter button				-
	SHUTTER				-
	Shutter Speed: 1/2 to 1/2000 sec. (Night Scene, A mode: up to 4 sec.)				-
	DRIVE				-
	Sequential shooting maximum speed: [Sequential shooting H][*]: approx. 20 fps with selectable 10 / 20fps				-
	[Sequential shooting L]: approx. 5 fps				-
	[Pro Capture][*]: approx. 10 fps				-
	*Electronic Shutter				-
	Maximum recordable frames prior to second release (for Pro Capture): Max. 5 frames				-
	Sequential shooting maximum recordable frames: [Sequential shooting H] RAW: Max. 14 frames, JPEG (LN): Until card is full				-



	[Sequential shooting L] RAW: Max. 40 frames, JPEG (LN): Until card is full				-
	Self-timer: Operation time: 12 sec., 2 sec., custom (Wait time: 1-30 sec., Number of shots: 1-10, Shot interval: 0.5 / 1 / 2 / 3 sec.)				-
	FLASH				-
	Flash intensity control method: TTL Auto, Manual				-
	Built-in flash: With				-
	Flash mode: Auto, Red Eye Reduction, Slow sync. (1st curtain), Red-eye Slow sync. (1st curtain), Fill-in, Manual (1/1 (FULL)-1/64), Flash Off				-
	Synchronization speed: Compatible with all shutter speeds				-
	Flash intensity control: Up to ± 2 EV in 1/3 EV steps				-
	WIRELESS FLASH CONTROL				-
	Compatible external flash: FL-50R, FL-36R, FL-300R, FL-600R, FL- 900R, FL-700WR				-
	Control method: Triggered and controlled by Olympus Wireless RC Flash system				-
	Commander Flash: Built-in flash				-
	Channel: 1 channel				-
	Group No.: 1 group				-
	WHITE BALANCE				-
	White balance mode: Auto WB, 6 Preset WBs, 3 Underwater WBs, 4 Capture WBs, Custom WB (Kelvin setting)				-
	White balance compensation: ± 7 steps along A-B / G-M axis				-
	*Except for Custom WB				-
	COLOUR MODE				-
	Colour matrix: sRGB, Adobe RGB				-
	PICTURE MODE				-
	Mode: i-Enhance, Vivid, Natural, Muted, Portrait, Monotone, Custom, e Portrait, Art Filters				-
	Gradation: Auto, Normal, High Key, Low Key [except when using i-Enhance, Underwater, Art Filters, Colour Creator]				-



ART FILTER				-
Art Filter (Variation / Art Effect): Pop Art (I, II / a, b, c, d, e, f)				-
Soft Focus (- / c, e)				-
Pale & Light Colour (I, II / a, b, c, d, f)				-
Light Tone (- / d, f)				-
Grainy Film (I, II / b, c, d, g, h)				-
Pin Hole (I, II, III / d)				-
Diorama (I,II / d)				-
Cross Process (I, II / b, c, d, f)				-
Gentle Sepia (- / a, b, c, d, f)				-
Dramatic Tone (I / b, c, d, e, f) (II / b, c, d, e, f, g, h)				-
Key Line (I, II / a, b, c, d, e)				-
Watercolour (I, II / a, b, c, d)				-
Vintage (I, II, III / a, b, c, d, e, f, i)				-
Partial Colour (I, II, III / a, b, c, d, e, f)				-
Bleach Bypass (I, II / a, b, c, d, e, f, i)				-
Instant Film (- / a, b, c, d, e, f, i)				-
Detail of Art Effect:				-
a. Soft Focus Effect				-
b. Pin-Hole Effect				-
c. White Edge Effect				-
d. Frame Effect				-
e. Star Light Effect				-
f. Blur Effect (Top & bottom, Left & Right)				-
g. B&W Effect (None, Yellow, Orange, Red, Green)				-
h. Pict. Tone (None, Sepia, Blue, Purple, Green)				-
i. Shade Effect (Top & bottom, Left & Right)				-
Colour Ring (for partial colour): 18 colour selectable				-
BRACKETING				-
Focus bracketing: Number of images 10 / 20 / 30				-
Focus step: Wide / Standard / Narrow				-
Focus stacking: With[*]				-
*Angle of view becomes slightly smaller				-



	HDR Function				-
	HDR (Auto composite): HDR[*]				-
	*SCN position				-
	LIVE COMPOSITE				-
	Update interval time / composite method: 0.5sec - 4.0 sec / Lighten Mode (Bright area prioritisation)				-
	INTERVAL MODE				-
	Interval Mode: Interval Time 1sec. - 24 Hours, Max 299 frames.				-
	Available to make Time Lapse movies automatically				-
	STAMP				-
	Date / Time stamp: Available				-
	Multi Aspect				-
	Aspect Ratio: 4:3, 3:2, 16:9, 1:1, 3:4				-
	ONE PUSH TELE-CONVERTER				-
	Magnification: x2 (P, A, Movie mode), x2 / x4 (Microscope mode)				-
	LEVEL GAUGE				-
	Detection: 2-axis				-
	VIDEO RECORDING				-
	Recording format: MOV (MPEG- 4AVC/H.264)				-
	Mode / Frame rate: [MOV]				-
	3840x2160 (4k) / 30p, 25p (Bit rate: Approx. 102Mbps)				-
	1920x1080 (FHD) / 30p, 25p / IPB (SF, F, N)				-
	1920x1080 (FHD) / 60p, 50p / IPB (SF, F, N)				-
	1280x720 (HD) / 30p,25p / IPB (SF, F, N)				-
	60p: 59.94fps, 50p: 50.00fps, 30p: 29.97fps, 25p: 25.00fps				-
	FHD (Superfine / 52Mbps, Fine / 30Mbps, Normal / 18Mbps)				-
	HD (Superfine / 52Mbps, Fine / 30Mbps, Normal / 18Mbps)				-
	*Frame rates may drop when particular Art Filters and Movie Effects are used.				-
	*UHS-I Speed Class 3 SD card must be used for 4K video and high speed movie.				-



	Maximum recording time: [MOV]				-
	Approx. 29min				-
	ART FILTER MOVIE				-
	With				-
	*Except for 4K and high speed movie				-
	*Frame rates may drop when certain Art Filters are used				-
	Time Lapse Movie: [MOV]				-
	3840×2160 (4K) / 5fps				-
	1920×1080 (FHD) / 5fps, 10fps, 15fps				-
	1280×720 (HD) / 5fps, 10fps, 15fps, 30fps				-
	High Speed Movie: 1920x1080 (FHD) / 120fps, recording time 20 sec.				-
	1280x720 (HD) / 240fps, recording time 20 sec.				-
	640x360 (SD) / 480fps, recording time 20 sec.				-
	Image Stabilisation for Video* Digital stabilisation (angle of view becomes slightly smaller)				-
	Grid Line: 2 types of grid lines				-
	Live View Output via HDMI: Monitor Mode (outputs video and info display to a connected monitor)[*]				-
	*Info display is not shown on the camera while recording.				-
	Exposure Control: Programme AE				-
	RECORDING (SOUND)				-
	Recording format: Wave format (Stereo linear PCM/16-bit, Sampling frequency 48kHz)				-
	Microphone / Speaker: Built-in stereo microphone / built-in mono speaker				-
	Microphone function: Wind noise reduction, recording volume, microphone volume limiter Audio dubbing possible for still pictures (up to 30 sec.)				-
	*May affect audio quality.				-
	WI-FI FUNCTION				-



	GPS info. Function: Via smartphone GPS data				-
	Wireless Control[*] Using the OI.Share app:				-
	Live View, Rec View, Wireless Touch AF shutter, Self Timer (w/countdown guidance, consecutive shooting, short video recording), power off, wireless release, video recording (video quality is restricted)				-
	iAuto / P / A / Live Composite and Microscope can be selected.				-
	Aperture, exposure, ISO sensitivity, white balance. Drove can be adjusted.				-
	*Private connection only.				-
	Image Share: File Type: JPEG, MOV				-
	Connect to up to 4 devices simultaneously. Marking function for image share.				-
	Easy Connection: QR code setting				-
	PLAYBACK				-
	Playback mode: Single-frame, information display, index display (4 / 9 / 25 / 100 frames), calendar, enlargement (2x - 14x), movie (with sound, FF / REW / Pause), slideshow (with sound including BGM, picture rotation (auto)				-
	Information display: Histogram (independent luminance / RGB available), Highlight / Shadow point warning, AF frame, Photographic information, OFF				-
	IMAGE EDITING				-
	Movie Editing function: Trimming (beginning / end) / in-movie image extraction (4K only)				-
	Editing function: RAW data edit, Gradation auto, Monochrome, Sepia, Red-eye fix, Saturation, Resize (1280x960, 640x480, 320x240), Trimming, Aspect, e- Portrait, Image Overlay, Post recording				-
	RAW data edit: RAW data edit based on settings of the camera (including e-Portrait, Art Filter, ART-BKT). Preview capability.				-
	PRINT				-



	Print function: Print reservation (DPOF)				-
	MENU				-
	Languages: 34 languages selectable:				-
	English, French, German, Spanish, Italian, Japanese, Korean, Traditional Chinese, Simplified Chinese, Russian, Czech, Dutch, Danish, Polish, Portuguese, Swedish, Norwegian, Finnish, Croatian, Slovenian, Hungarian, Greek, Slovakian, Turkish, Latvian, Estonian, Lithuanian, Ukrainian, Serbian, Bulgarian, Rumanian, Indonesian, Malay, Thai				-
	TOUGH CAPABILITIES				-
	Waterproof: JIS/IEC protection class 8 (IPX8)				-
	Dustproof: JIS/IEC protection class 6 (IP6X)				-
	Freezeproof: Down to -10°C				-
	Crushproof: Up to 100 kgf				-
	Shockproof: Up to 2.1 m				-
	FIELD SENSOR SYSTEM				-
	Sensor: GPS (GLONASS,QZSS), compass, manometer, temperature sensor, Acceleration sensor				-
	CUSTOM				-
	Mode dial my set: Modes C1 and C2 can be accessed by mode dial				-
	Copyright Settings: With				-
	INPUT / OUTPUT				-
	Remote controller connector: USB microB				-
	HDMI connector: Micro HDMI (type D)				-
	Wireless LAN: Built-in (IEEE 802.11 b / g / n)				-
	PC interface: USB2.0 Hi-Speed				-
	DC connector: USB micro B				-
	POWER REQUIREMENTS				-
	Battery: LI-92B Li-ion battery				-
	AC Adapter: F-5AC				-
	Number of recordable images: Approx. 340 shots				-
	Battery life for movie recording: Approx. 50 minutes[*] (under standard JEITA testing)				-



	Approx. 110 minutes (when zoom and other operational functions are not used)				-
	*When repeatedly recording at the maximum time of 29 minutes				-
	Temperature: -10 - +40°C (when in operation) / -20 - +60°C (when stored)				-
	Humidity: 30 - 90% (when in operation) / 10 - 90% (when stored)				-
	OPERATING ENVIRONMENT				-
	Box contents: Body, USB cable, Hand Strap, instruction manual, warranty card, LI-92B Li-ion battery, F-5AC USB-AC adapter				-
	BOX CONTENTS				-
	Box contents: Body, USB cable, Hand Strap, instruction manual, warranty card, LI-92B Li-ion battery, F-5AC USB-AC adapter				-
56	UPS, 800VA , saving time 1 hour	unit	2	5,000.00	10,000.00
57	UPS, Smart-UPS 3000 , 3000watts, compatible with APC smart humidity-temperature controller (must be of the same fleet of VSU network UPS) * supplier must provide complete Datasheets *2 years warranty	units	2	50,000.00	100,000.00
		TOTAL			3,321,739.00

Sgnd
DILBERTO O. FERRAREN
 BAC Chairman