

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Supply and Delivery of Office and I.T. Equipment & Supplies

(GOODS-21-22)

Government of the Republic of the Philippines

May 17, 2021; 9:00 AM Cooperative Building, VSU Market, Visca, Baybay City, Leyte

> Sixth Edition July 2020

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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

CDA - Cooperative Development Authority.

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

DDP – Refers to the quoted price of the Goods, which means "delivered duty paid."

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – "Free Carrier" shipping point.

FOB – "Free on Board" shipping point.

Foreign-funded Procurement or Foreign-Assisted Project— Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

Framework Agreement – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as "Call-Offs," are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

STFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

Supplier – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

UN – United Nations.

Section I. Invitation to Bid



Invitation to Bid for SUPPLY AND DELIVERY OF OFFICE AND I.T. EQUIPMENT & SUPPLIES

1. The Visayas State University through the *GF*, *STF*, *TF* 2021 intends to apply the sum of *Three Million Six Hundred Fifty-Seven Thousand One Hundred Twenty-Nine Pesos (PhP 3,657,129.00)* being the ABC to payments under the contract for *Supply and Delivery of Office and I.T. Equipment & Supplies (GOODS-21-22)*. Bids received in excess of the ABC shall be automatically rejected at bid opening.

The *Visayas State University – Main Campus*, through the *GF*, *STF*, *TF* 2021 intends to apply the following ABC per item to payments under the contract for each item, to wit:

Item No.	Item Description & Specifications	Unit	Qty	ABC/Unit	Total ABC
1	Toner, NPG 67	pcs	2	17,000.00	34,000.00
	■Yellow for Canon C3320 Image Runner Advance				
	■(photocopier. Printer/scanner) machine				
2	Laptop 14" (i5)	unit	11	44,000.00	484,000.00
	Processor:				
	■Intel Core i5-at least 10th Generation Processor				
	■1.0 GHz 6M Cache				
	■up to 3.60 GHz or higher				
	■Operating system:				
	■LicensedWindows 10 Home				
	Memory:				
	◀1 x SO-DIMM socket (for expansion)				
	■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				
	■Storage:				
	◀512GB PCle Gen3 x2 SSD				
3	Two-Way Radio Walkie Talkie	sets	2	5,000.00	10,000.00
	■NTC Registered				
	■Frequency Range: UHF 400-470 MHz				
	■RF Power: ≤ 5 W				
	■Channel Capacity: 16 Channel				
	■Spacing: 25 KHz				
	■Voltage Operated: 3.7 V				
	■Battery: 1500 MAh Li-ion				
	■Frequency stability: ±. 5ppm				

	■Antenna Impedance: 50Ω				
	■RF Output Power: 3 W				
	■RF Output Power: 3 W ■RF Output Power: 3 W				
	Output Power: 3 vv Modulation: F3E				
<u> </u>	©Spurious Emission: ≤65dB				
	'				
	■Audio Distortion: ≤5%				
	■Transmitting Current: ≤1. 3A		4	00 000 00	00 000 00
4	Ink, HP Designjet T770	set	1	22,000.00	22,000.00
	■HP 72 Photo black				
	■Cyan, Magenta, Gray, Matte Black				
_	■6 colors bundle		4	050.00	0.000.00
5	Desktop Microphone	pcs	4	650.00	2,600.00
	©Compatible with:				
	■Desktop/Notebook/PC				
	■Windows 7-10 compatible				
	■Pickup: 6mm Condenser Mic				
	Microphone Directivity: Omnidirectional				
	■Sensitivity: -58db±3db				
	■Signal-to-noise Ratio: ≤50dB				
	■Cable Length: 2.5m				
	■Type: 3.5mm Plug				
6	Desktop Computer (i7), Assembled, No Monitor	unit	1	50,000.00	50,000.00
	■Processor:				
	Intel Core i7 10th Generation or higher				
	■Motherboard:				
	Intel H310 Ultra Durable motherboard				
	⋖ Gaming LAN				
	◄ LGA-1151				
	■Memory:				
	◀16GB DDR4 2400 DIMM Desktop Memory				
	■SSD: at least 500GB				
	■Video Card: Nvidia GTX 1650				
	■Casing with Power Supply				
	■Operating System:				
	◆Genuine Windows 10 Home (OEM)				
	■11.1 Volts 58 Whr 6 Cell Li-ion				
8	Desktop Computer (i3)	set	2	30,000.00	60,000.00
	■Processor:				
	■Intel Core i3-at least 10th Generation Processor				
	◄(9M Cache, up to 4.10 GHz) or higher				
	■Motherboard:				
	Intel H310 Ultra Durable motherboard				
	■Gaming LAN				
	■Anti-Sulfur Resistor				
	 ■LGA-1151				
	Memory:				
	◀8GB DDR4 2400 DIMM Desktop Memory				
	■SSD: 240GB				
	■Keyboard and Mouse Combo				
	•				
	■Monitor: at least 18.5 inch				
	■Casing with Power Supply■Monitor: at least 18.5 inch				

	◀HD Ready (1366 X 768)				1
	■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	+			
9		btl	17	350.00	E 0E0 00
10	Ink, Epson 003,Genuine Black 65mL Ink, EPSON 003,Genuine Cyan 65mL	btl btl	14	350.00	5,950.00 4,900.00
11	Ink, EPSON 003,Genuine Cyan 65mL	btl	14	350.00	4,900.00
12	Ink, EPSON 003,Genuine Wagenta 05mL	btl	14	350.00	· ·
13	Ink, EPSON 003,Genuine reliow 65mL Ink, Epson, genuine (C) T664, 70 ml	+	10	350.00	4,900.00 3,500.00
	, , ,	pcs	10		,
14	Ink, Epson, genuine (M) T664, 70 ml	pcs		350.00	3,500.00
15	Ink, Epson, genuine, (Y) T664, 70 ml	pcs	10	350.00	3,500.00
16	Ink, Epson, genuine, (BK) T664, 70 ml	pcs	23	350.00	8,050.00
17	Mouse, Wired, Optical, USB	pcs	9	210.00	1,890.00
	■USB Port Connectivity				
	Sensor: Optical				
	■DPI: 1600				
	■Work method: Wired				
	Buttons:				
	✓ right button				
	■Scroll wheel direction:				
	⋖ Two way				
	■Design highlights:				
	■Easy installation				
	■1600 DPI high-definition tracking engine				
	■Anti-slip scroll wheel				
	▼ Full-size				
18	USB Hub, 4 gangs	рс	1	250.00	250.00
19	Unifi 500W PoE+ Switch	unit	1	35,000.00	35,000.00
	■24 ports PoE+ Switch 500W				
	■Network Interfaces:				
	◄ (24) 10/100/1000 Mbps				
	■RJ45 Ethernet Ports (2)				
	■1 Gbps SFP Ethernet Ports				
	■Management Interface:				
	◄(1) RJ45 Serial Port Out-of-Band				
	■Ethernet In-Band				
	■Total Non-Blocking Throughput:				
	◄ 26 Gbps				
	■Switching Capacity: 52 Gbps				
	■Forwarding Rate: 38.69 Mpps				
	■MAC Address Table: 16384				
	■Maximum Aggregations: 6				
	Monitoring Sessions 1				
	■Maximum VLANs 255				
	EMINICALITUM VERNO ZOO				

	■Power Method:				
	■Power Metriod. ■100-240VAC/50-60 Hz				
	■ T00-240VAC/50-60 HZ ■ Universal Input				
	·				
	Power Supply AC/DC, Internal, 500W DC				
	Max. Power Consumption				
	■Including PoE Output: 500W				
	■Excluding PoE Output: 30W				
	■ESD/EMP Protection Air:				
	◀± 24 kV, Contact: ± 24 kV				
	■Shock and Vibration:				
	■ETSI300-019-1.4 Standard				
	■Operating Temperature:				
	4-5 to 40° C (23 to 104° F)				
	■Operating Humidity:				
	■5 to 95% Noncondensing				
	■PoE Interfaces PoE+ IEEE 802.3af/at:				
	◄ (Pins 1, 2+; 3, 6-)				
	■24VDC Passive PoE (Pins 4, 5+; 7, 8-)				
	■Max. PoE+ Wattage per Port by PSE 34.2W				
	■Voltage Range 802.3at Mode 50–57V				
	■Max. Passive PoE Wattage per Port 17W				
	■24V Passive PoE Voltage Range 20-27V				
	■Should be compatible				
	■with existing VSU Unifi Controller				
				† 	
1	■1 year warranty				
20	■1 year warranty Wireless Access Point	unit	2	9,900.00	19,800.00
20	Wireless Access Point	unit	2	9,900.00	19,800.00
20	Wireless Access Point Networking Interface:	unit	2	9,900.00	19,800.00
20	Wireless Access Point	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■Networking Interface: ◄(1) 10/100/1000 Ethernet Port	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■Networking Interface: ◄(1) 10/100/1000 Ethernet Port ■Buttons Reset ■Power Method 802.3af PoE	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■Networking Interface: ◄(1) 10/100/1000 Ethernet Port ■Buttons Reset ■Power Method 802.3af PoE ■Power Supply UniFi Switch (PoE)	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■Networking Interface: ◄(1) 10/100/1000 Ethernet Port ■Buttons Reset ■Power Method 802.3af PoE ■Power Supply UniFi Switch (PoE) ■Power Save Supported	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄23 dBm	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄23 dBm ◄26 dBm	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄23 dBm ■26 dBm	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄26 dBm ■MIMO ◄2.4 GHz	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄23 dBm ◄26 dBm ■MIMO ◄2.4 GHz ◄5 GHz	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄26 dBm ■MIMO ◄2.4 GHz ◄5 GHz ◄5 GHz ◄5 GHz	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄23 dBm ■MIMO ◄2.4 GHz ◄5 GHz ◄26 dBz ■4x4	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄23 dBm ◄26 dBm ■MIMO ◄2.4 GHz ◄5 GHz ◄5 GHz ◄3 GHz ◄4 S GHz ◄5 GHz ◄2 S GHz ◄1 S GHz ◄2 S GHz ◄2 S GHz ◄2 S GHz ◄2 S GHz ◄3 S GHz ◄3 S GHz ◄4 S GHz ◄4 S GHz ◄4 S GHz ◄4 S GHz ◄2 S GHz ◄3 S GHz ◄4 S GHz	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄23 dBm ◄26 dBm ■MIMO ◄2.4 GHz ◄5 GHz ◄2x2 ◄4x4 ■Radio Rates ◄2.4 GHz	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄26 dBm ■MIMO ◄2.4 GHz ◄5 GHz ◄2x2 ◄4x4 ■Radio Rates ◄2.4 GHz ◄5 GHz	unit	2	9,900.00	19,800.00
	Wireless Access Point ■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 ◄5 GHz ◀23 dBm ◄26 dBm ■MIMO ◀2.4 GHz ◀5 GHz ◀2x2 ◀4x4 ■Radio Rates ◄2.4 GHz ◀5 GHz ◀300 Mbps	unit	2	9,900.00	19,800.00
20	Wireless Access Point ■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 ◄5 GHz ◄26 dBm ■MIMO ◄2.4 GHz ◄5 GHz ◄2x2 ◄4x4 ■Radio Rates ◄2.4 GHz ◄5 GHz	unit	2	9,900.00	19,800.00

	■ 2.4 GHz				
	▼ 5 GHz				
	◀(2) Single-Port,				
	Single-Polarity Antennas, 2.8 dBi each				
	✓ Single-Port,				
	► Dual-Polarity Antennas, 3 dBi each				
	Buai-Polanty Amerinas, 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				
	■& 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				
	■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				
	■Should be compatible				
	■with existing UniFi Controller				
21	Uninteruptible Power Supply Battery Backup	unit	1	10,000.00	10,000.00
	■1500VA/900w			,	-,,-
	■6 battery backup sockets				
	■USB, coax, phone/network, and serial ports				
	Automatic Voltage Regulation (AVR)				
	■LCD screen				
	■at most 4 hours charging time				
22	UTP Cable (300 meters per box)	box	1	7,000.00	7,000.00
—	■UTP Cable cat6	20%	·	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,555.56
	■Cat 6 Cable UTP Unshielded AWG24				
	■Gray Data LAN Cable				
	■1000 feet 305m 1000ft.				
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23	Desktop System Unit Only	unit	4	15,000.00	60,000.00
20		unit	7	10,000.00	00,000.00
	■Intel Pentium Gold G5400 or higher				
	■Intel H310 Chipset Ultra durable Motherboard				
	■8 GB DDR4 Memory or higher				
	■240 GB SSD				
	■Casing with 500W PSU or higher				
	■500W IC controlled AVR				
	■Keyboard and mouse combo				
24	Micro SD Card, 128 GB	pcs	2	1,500.00	3,000.00
	■Memory SD Card:		_	1,000.00	3,000.00
	■128 GB UHS-I SDXC				
	■Card Type: SDXC				
	■Storage Capacity: 128GB				
	■Bus type: UHS-1				
	■Data Transfer Read Speed:				
	■170 MB/s Maximum (Burst)				
	Write speed:				
	■90 MB/s maximum (Burst)				
	Write speed:				
	■30 MB/s Minimum				
	■Built-in Write Protect Switch				
	Durability:				
	■Shockproof				
	■Temperature Extremes				
	▼veriperature Extremes ✓waterproof				
	▼X-ray Proof				
	■Opening Temperature:				
	4-25 to 85C				
25	Smart Phone, 128 GB ROM, 6GB RAM	unit	1	14,990.00	14,990.00
23	Super AMOLED	unit	'	14,330.00	14,330.00
	■6.2 to 6.4 inches				
	■At least 1080 x 2400 pixels				
	■20:9 ratio (~411 ppi density)				
	■Android 10, One UI 2.0 or higher				
	■Mediatek MT6768				
	■ Helio P65 (12nm) or higher				
	■Octa-core (2x2.0 GHz Cortex-A75				
	■ & 6x1.7 GHz Cortex-A55) or higher				
	■microSDXC (dedicated slot)				
	■Quad camera with At least 48 MP				
	■ Quad carriera with At least 46 lvir ■ f/2.0, 26mm (wide)				
	■ 1/2.0', 2.8µm				
	▼PDA Fat least 8 MP				
	▼ FDA Fat least 6 MF				
	◄(/2.2, 123 ◄(ultrawide)				
	◄ (ultrawide) ◄ 1/4.0"		-		
	■1.12µmat least 5 MP ■10.4 ■1.12µmat least 5 MP ■1.12µmat least 6 MP ■1.12µmat least 6 MP ■1.12µmat least 7 MP ■1.12µmat least 8 MP ■1.12µmat				
	■f/2.4				
	■f/2.4, (depth)				
	■At least 128GB storage, 6GB RAM				

	⊚ Wi-Fi 802.11 a/b/g/n/ac	<u> </u>			
	■wi-ri ouz.11 arb/g/ii/ac ■dual-band				
	■Wi-Fi Direct, hotspot				
	■Yes, with A-GPS, GLONASS, GALILEO, BDS				
	■USB Type-C 2.0, USB On-The-Go				
	■At least Li-Po 5000 mAh, non-removable				
	■Fast charging at least 15W				
26	Computer Printer	unit	5	11,000.00	55,000.00
20	■All-in-one/Multifunction Colored Ink Tank	unit	3	11,000.00	33,000.00
	Sultra-low-cost printing:				
	■Oftra-iow-cost printing. ■Print up to 8,100 pages in black				
	■and 6,500 in colour				
	•				
	Next generation ink filling system: Trian heads and many free refile.				
	■Enjoy hassle and mess-free refills				
	■with the enhanced ink bottles ■Mr. F: Mr. F: D: + 10 ■Mr. F: Mr. F: Mr. F: D: + 10 ■Mr. F: Mr. F: Mr. F: Mr. F: D: + 10 ■Mr. F: Mr. F:				
	■Wi-Fi, Wi-Fi Direct & apps:				
	■3-in-1:				
	▼Print, copy & scan				
	■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				
27	Speaker, for PC, 2.1 (Speaker with Subwoofer)	рс	1	2,000.00	2,000.00
	■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				
28	External Hard Disk Drive	unit	2	5,500.00	11,000.00
	⊚ (Portable, 2TB), USB 3.0				
	■Shock-absorbing silicon casing				
	■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				
29	HDMI to HDMI cable	рс	1	500.00	500.00
	■HDMI to HDMI cable/chord 1.8 meter long;	,			
30	Automatic Voltage Regulator	pcs	2	8,000.00	16,000.00
	■Capacity: 5000 VA	- 	1	· ·	· · · · · · · · · · · · · · · · · · ·

	■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				
31	Computer Printer	unit	1	14,900.00	14,900.00
31	■3-in-1	unit	!	14,900.00	14,300.00
	■Print, Scan & Photocopy				
	■Print Method:				
	◆On-demand ink jet (piezoelectric)				
	Minimum Ink Droplet Volume:3 pl Dript Disertions				
	Print Direction: A Bidination of pointing and pointing				
	■Bi-directional printing				
	■Uni-directional printing				
	Nozzle Configuration:				
	◀180 nozzles Black				
	√59 nozzles per colour (C,M,Y)				
	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				
32	AVR, 500W (IC Controlled)	unit	2	500.00	1,000.00
	■Power Output: 500 W				
	■Power Factor Correction (PFC):				
	Active PFC with Value of 0.98				
	■Fan Type:				
	■1 x 120 mm Smart				
	■and Silent Fan Control 22 dBA				
	Safety Standards:				
	▼FCC, CB, CCC, TUV, CE, C-tick,				
	■EMI, EMC, S-Intertek, CPT-AB15				
33	Flash Drive, at least 32GB USB 3.0	pcs	52	800.00	41,600.00
34	Netbook Laptop, Intel Celeron	unit	1	15,000.00	15,000.00
	■Intel® Celeron® Processor N3350				
	■Intel HD Graphics 500 GPU				
	■14.1 inch HD resolution				
	■4GB RAM for Advanced Multitasking				
	■128GB EMMC Storage Capacity				
	■38000mWh Large Battery				
	■Mini-HDMI Output				
	■&Two standard USB 3.0 Slot				
35	Computer Keyboard USB	pcs	4	400.00	1,600.00
	Tompator Noyboard Gob	1 200	l r	.50.00	1,000.00

	■Standard Keyboard with 104 Keys				
	■Standard Reyboard with 104 Reys ■USB Connection				
	■Low Profile Key Caps				
	■Minimum Key Noise				
	■Laser Printing for Key Layout				
	Spill Resistant Design	1.4	40	050.00	4 000 00
	EPSON L220 Ink Cartridge Black	btls	12	350.00	4,200.00
	Laptop 14" (i3)	unit	1	33,000.00	33,000.00
	■Processor:				
	◆Intel Core i3-at least 10th Generation Processor 4M Cache 10th 20th 20th 20th 20th 20th 20th 20th 2				
	Operating System :				
	Memory:				
	■4GB Onboard memory				
	■1 x SO-DIMM socket				
	◀total up to 8 GB SDRAM				
	■Display: 14.0" (16:9)				
	◀LED-backlit HD (1366x768)				
	◀60Hz Anti-Glare				
	■Panel with 45% NTSC				
	■Graphics :				
	Integrated Intel UHD Graphics				
	■Storage :				
	◀512GB PCle Gen3 x2 SSD				
	■Networking:				
	Integrated Wi-Fi 5 (802.11 ac)				
	■Bluetooth 5.0				
	■Battery :				
	■2 -Cell 32 Wh lithium-polymer battery				
	Computer Webcam	pcs	7	1,000.00	7,000.00
	Uninteruptible Power Supply, 1000 VA	unit	2	3,000.00	6,000.00
	■1000VA/600W capacity				
	■Frequency Range: 60 Hz				
	■Freq. Range (Batt. Mode): 60 Hz ± 1 Hz				
	■Transfer Time: Typical 4-8 ms				
	■Waveform (Batt. Mode): Simulated Sine Wave				
	■Back-up Runtime: 10-15 mins				
	■Voltage: 220 VAC				
	■Voltage Range: 162-270 VAC				
	EPSON L220 Ink Cartridge Cyan	btls	2	350.00	700.00
41	EPSON L220 Ink Cartridge Magenta	btls	2	350.00	700.00
42	Digital Multimeter	рс	2	7,000.00	14,000.00
	■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				
t t	◄ 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: 1001 (
	■at DCV rangeSafety: IEC61010CAT				
	■.Ⅲ600V/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				
43	Video Card	unit	1	9,000.00	9,000.00
	© CUDA Cores at least 768				
	■ Core Speed: at least 1290 MHz				
	■Boost Speed: at least 1392 MHz				
	■Memory Size: at least 4GB GDDR5				
	■Memory Interface: at least 128-bit				
	■Memory Frequency: at least 7 Gbps				
	■TDP: at least 75 Watts				
	■Multi-Screen Support: Yes				
	■Resolution:7680X4320@60hz Digital				
	■Bus Type: PCI Express 3.0 16x				

44	Printer	unit	3	8,000.00	24,000.00
	■Tank Ink System				
	■Printer Type:				
	■Print, Scan and Copy				
	■Scanner Type:				
	■Sensor Type: CIS				
	■Optical Resolution:				
	◄ 600 x 1200 dpi				
	©Copy Speed:				
	■Maximum Copies from Standalone: 20 copies				
	■Maximum Copy Size: A4, Letter				
	© ISO 29183				
	■A4 Simplex Flatbed (Black / Colour):				
	■Up to 7.0 ipm / 1.7 ipm				
	■Max Copy Resolution:				
	■ 300 x 300 dpi				
	■Paper Handling:				
	■Up to 20 sheets-Premium Glossy Photo Paper				
	■10 sheets-Envelope, 30 sheets-Postcard				
	Output Capacity:				
	■Up to 30 sheets, A4 plain paper				
	■20 sheets, Premium Glossy Photo Paper				
	■Maximum Paper Size:				
	■ 215.9 x 1200 mm (8.5 x 47.24")				
	■Paper Size:				
	■ dpe 3ize. ■ Legal				
	Indian-Legal (215 x 345 mm)				
	■8.5 x 13", Letter, A4, 16K (195 x 270 mm),				
	■B5, A5, B6, A6, Hagaki (100 x 148 mm)				
	■ 5 x 7", 4 x 6", Envelopes: #10, DL, C6				
	■Print Margin:				
	⋖ 0 mm top, left, right				
	◆bottom via custom settings in printer driver				
	Nozzle Configuration:				
	■180 x 1 nozzles Black				
	√59 x 1 nozzles per colour (C,Y,M) Distribution				
	■Print Direction: Bi-directional printing				
	Maximum Print Resolution:				
	⋖ 5760 x 1440 dpi				
	(with Variable-Sized Droplet Technology)				
	⋖ 5760 x 1440 dpi				
	(with Variable-Sized Droplet Technology)				
	■Minimum Ink Droplet Size: 3 pl				
_	■Printer Language: ESC / P-R				
46	UPS, at least 500 w	рс	1	2,550.00	2,550.00
47	LCD Projector, XGA (1024x768)	unit	1	27,000.00	27,000.00
	■Power Consumption				
	■282 Watt, 203 Watt (economy)				
	■0.2 Watt (standby)				
	◆On mode power consumption as defined				
	◀in JBMS-84 257 Watt				

	■Supply Voltage				
	■ AC 100 V - 240 V, 50 Hz - 60 Hz				
	■Product Dimensions				
	■ Toddet Differsions ■302 x 237 x 82 mm (Width x Depth x Height)				
	■Product weight				
	■Product weight ■2.5 kg				
	■Noise Level				
	■Normal: 37 dB (A) - Economy: 28 dB (A)				
	, , , , , ,				
	Supported Temperature				
	◆Operation 5° C - 35° C, Storage -10° C - 60° C				
	Supported Humidity				
	◆Operation 20% - 80%, Storage 10% - 90% ■ Labeled C. fragger				
	■Included Software				
	■iProjection				
	■Options				
	■Loudspeaker				
	<2 Watt		1		
	■What's in the box				
	Main unit				
	✓Power cable				
	■Quick Start Guide				
	■Remote control incl. batteries				
	■User manual (CD)				
	■Warranty card				
	■Room Type / Application				
	◆Home Office				
	◆Home Photo				
	≺Streaming				
	▼TV & Box sets				
	■Positioning				
	← Ceiling Mounted, Desktop				
	© Colour				
	⋖ White				
48	Cartridge Ribbon, Genuine, Epson FX-1170	bxs	2	600.00	1,200.00
49	Computer Printer Ink, HP680 Cartridge, Black	pcs	10	500.00	5,000.00
50	Computer Printer Ink, HP680 Cartridge, Colored	pcs	10	500.00	5,000.00
51	Computer Printer Ink, HP678 Cartridge, Black	pcs	12	500.00	6,000.00
52	Computer Printer Ink, HP678 Cartridge, Colored	pcs	12	500.00	6,000.00
53	Computer Printer Ink, HP704 Cartridge, Black	pcs	50	500.00	25,000.00
54	Computer Printer Ink, HP704 Cartridge, Colored	pcs	50	500.00	25,000.00
55	Computer Ink	pcs	5	3,800.00	19,000.00
	■HP Laserjet P1102				
	Color Black 85A				
56	Ink, Epson, Genuine, (BK) T6641, 70ml	btls	11	400.00	4,400.00
57	Ink, Epson, Genuine, (C) T6642, 70ml	btls	11	400.00	4,400.00
58	Ink, Epson, Genuine, (M) T6643, 70ml	btls	11	400.00	4,400.00
59	Ink, Epson, Genuine, (Y) T6644, 70ml	btls	11	400.00	4,400.00
60	Wi-Fi Duplex All-in-One Ink Tank Printer	unit	1	15,000.00	15,000.00
	■Printer Type:		İ		

	■Print, Scan & Copy				
	■Print Method:				
	■ On-demand inkjet (piezoelectric)				
	Minimum Ink Droplet Volume:				
	■3 pl				
	■Printer Language:				
	■ Finter Language. ■ESC / P-R				
	■Print Direction:				
	■ Finit Direction. ■ Bi-directional printing, Uni-directional printing				
	Nozzle Configuration:				
	■180 nozzles Black				
	■ 100 Hozzles Black ■ 59 nozzles per colour (Cyan, Magenta, Yellow)				
	■Maximum Resolution:				
	■ 5760 x 1440 dpi				
	► (with Variable-Sized Droplet Technology)				
	Automatic 2-sided Printing:				
	■Automatic z-sided Printing: ■Yes (up to A4)				
	,			 	
	Print Speed Physics Professite 10 v 15 pers / 4 v 6 " *2"				
	◆Photo Default - 10 x 15 cm / 4 x 6 " *2: Approx 60 cos per photo (Perder) *1				
	➤ Approx. 69 sec per photo (Border) *1 ➤ Approx. 92 sec per photo (Borderless) *1			 	
	■ Approx. 92 sec per photo (Bordeness) *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 				
	· · · · · · · · · · · · · · · · · · ·				
	■ISO 24734, A4 Duplex (Black / Colour):				
64	► Up to 6.0 ipm / 4.0 ipm *1 Toner, NPG 67	200	3	14 000 00	42,000,00
61	, , , , , , , , , , , , , , , , , , ,	pcs	3	14,000.00	42,000.00
	Black for Canon C3320 Image Runner Advance Chateograph points (accounts) reaching				
62	■(photocopier, printer/scanner) machine Toner, NPG 67		2	17,000.00	34,000.00
02	,	pcs		17,000.00	34,000.00
	■Cyan for Canon C3320 Image Runner Advance				
	(photocopier, printer/scanner) machine		0	47,000,00	24 000 00
63	Toner, NPG 67	pcs	2	17,000.00	34,000.00
	■Magenta for Canon C3320 Image Runner advance				
	©(photocopier, printer/scanner) machine	9	2	2 200 00	44 400 00
64	External Hard Disk Drive (Portable, 1TB), USB 3.0	unit	3	3,800.00	11,400.00
65	Desktop Computer	unit	1	250,000.00	250,000.00
	■Processor: AMD Ryzen 9 5900X				
	■Graphics coprocessor: NVIDIA GeForce RTX 3090				
	Chipset: AMD X570 Chipset			 	
	■Memory: 16GB DDR4-3200 LO-DIMM x 2				
	■SATA: 8 x SATA 6.0Gb/s ports				
	Storage: ◀2TB SATA 7200RPM 3.5" HDD			 	
				 	
	■1TB M.2 NVMe [™] PCle® 3.0 Performance SSD			 	
	Operating System: Licensed Windows 10 Pro				
	▼Front I/O Ports:				
	■2x USB 3.2 Gen 1 Type-A				
	■2x USB 3.2 Gen 1 Type-C ■4x Use debage				
	◀1x Headphone ☐4x Missack are				
	◀1x Microphone				

	■Rear I/O Ports:				
	■ Ax USB 3.2 Gen 1 Type-A				
	■1x USB 3.2 Gen 2 Type-C				
	■3x USB 3.2 Gen 2 Type-C				
	■1x Mic-in				
	■1x Rear Speaker Out				
	■1x Real Speaker Out ■1x Center / Sub Woofer				
	■1x Center / Sub Wooler ■1x Front Speaker Out (Line Out)				
	■1x Front Speaker Out (Line Out)				
	■1x S/PDIF-Out				
	■1x S/FDIF-Out ■1x RJ45 Gigabit Ethernet				
	■2x HDMI-Out				
	■1x DisplayPort				
	■Expansion Slots:				
	■2 x PCIe® 4.0 x1				
	■3 x PCle® 4.0 x16				
	■2 x M.2 connector for SSD				
	■4 x DDR4 U-DIMM Slots				
	■Audio: SupremeFX S1220A CODEC				
	■Network and communication: Wi-Fi 5 (802.11ac)+Bluetooth				
	5.0 (Dual band) 2*2				
	■Power Supply: 700W 80 PLUS (GOLD)				
	■Weight: 15.0 kg				
	■Dimensions (W x D x H): 27.90 x 43.30 x 50.10 cm				
	■VGA Installation Type: Vertical				
	■Monitor: 34" Ultra WQHD Monitor				
66	Smart Television	unit	4	75,000.00	300,000.00
66	■Screen Size: 65"	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range)	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex)	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T	unit	4	75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T ■Analog Tuner: Yes; HDMI: 3	unit		75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T ■Analog Tuner: Yes; HDMI: 3	unit		75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T ■Analog Tuner: Yes; HDMI: 3 ■USB: 2 ■Component In (Y/Pb/Pr): 1	unit		75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T ■Analog Tuner: Yes; HDMI: 3 ■USB: 2 ■Component In (Y/Pb/Pr): 1 ■Composite In (AV): 1(Common Use for Component Y)	unit		75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T ■Analog Tuner: Yes; HDMI: 3 ■USB: 2 ■Component In (Y/Pb/Pr): 1 ■Composite In (AV): 1(Common Use for Component Y) ■Ethernet (LAN): Yes	unit		75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T ■Analog Tuner: Yes; HDMI: 3 ■USB: 2 ■Component In (Y/Pb/Pr): 1 ■Composite In (AV): 1(Common Use for Component Y) ■Ethernet (LAN): Yes ■Digital Audio Out (Optical): 1	unit		75,000.00	300,000.00
66	■Screen Size: 65" ■Resolution: 3,840 × 2,160 ■Picture Engine: UHD Upscaling ■Motion Rate: 120 ■PQI (Picture Quality Index): 1400 ■HDR (High Dynamic Range) ■Dynamic Contrast Ratio: Mega Contrast ■Micro Dimming: UHD Dimming ■PurColor, Auto Depth Enhancer ■Auto Motion Plus, Film Mode ■Dolby Digital Plus, DTS Codec ■Sound Output (RMS): 20W ■Speaker Type: 2CH(Down Firing w/Bass Reflex) ■Multiroom Link, Web Browser, Smart View ■TV to Mobile – Mirroring ■Mobile to TV - Mirroring, DLNA ■360 Video Player, WiFi Direct, Analog Clean View ■Digital Broadcasting: ISDB-T ■Analog Tuner: Yes; HDMI: 3 ■USB: 2 ■Component In (Y/Pb/Pr): 1 ■Composite In (AV): 1(Common Use for Component Y) ■Ethernet (LAN): Yes	unit		75,000.00	300,000.00

	FALIDMI A / Deturn Ch. Cunnert			<u> </u>	
	■HDMI A / Return Ch. Support■HDMI Quick Switch, Wireless LAN Built-in, Anynet+ (HDMI-				
	CEC)				
	■Slim Type: Slim				
	■Stand Type: V-Shape				
	■Instant On: Yes				
	■Processor: Quad Core				
	Accessibility: Voice guide(AU English)/ Enlarge/ High				
	contrast/ Learn TV Remote(AU English)				
	■Digital Clean View, Auto Channel Search, Auto Power Off				
	©Caption (Subtitle), Connect Share™ (HDD), ConnectShare™ (USB 2.0), Embeded POP				
	■EPG, Extended PVR, USB HID Support, Ultra Clean View, Eco Sensor				
	■Power Supply: AC100-240V 50/60Hz				
	■Power Consumption (Max): 265W				
	■Package Size (WxHxD): 1617 x 980 x 255 mm				
	■Set Size with Stand (WxHxD): 1460.3 x 907.2 x 369.1 mm				
	■Set Size without Stand (WxHxD): 1460.3 x 845.8 x 131.1				
	mm				
	■Package Weight: 36.70 kg				
	■Set Weight with Stand: 28.30 kg				
	■Set Weight without Stand: 26.1 kg				
	Accessory: Remote Controller				
	■Batteries, Mini Wall Mount Support, Vesa Wall Mount				
	Support, User Manual				
	■E-Manual, Power Cable, Slim Gender Cable				
68	Laptop	unit	1	64,000.00	64,000.00
	■OS: Licensed Windows 10				
	■Processor: Intel Corei7 at least 10th gen CPU				
	■RAM: at least 8 GB				
	■System: 64 bit OS x 64 based processor				
	■Wifi, bluetooth, Camera				
	■HDD: 1 TB or Higher + 512 SSD or higher				
	Weight: at most 1.85				
69	All-in-One computer (Built-in components in the Monitor)	unit	1	92,999.00	92,999.00
	■Display: 21.5-inch (diagonal) LED backlit display	ariit	•	02,000.00	02,000.00
	■1920 by 1080 resolution with support for millions of colors				
	■Processor: 3.2GHz 6 core Intel Core i7, Turbo Boost up to				
	4.6GHz				
	Memory: 16GB of 2400MHz DDR4 memory OFFICE OF CORP. 111 4TP F. 11 P. 11 OFFICE OF CORP. 111 4TP F. 11 P. 11 OFFICE OF CORP. 111 4TP F. 11 P. 11 OFFICE OF CORP. 111 4TP F. 11 P. 11 OFFICE OF CORP. 111 4TP F. 11 P. 11				
	Storage: 256GB SSD with 1TB Fusion Drive				
	■Graphics: Radeon Pro 555X with 2GB of GDDR5 memory				
	■Video Support and Camera: FaceTime HD camera				
	■Simultaneously supports full native resolution on the built in display				
	■at millions of colors (21.5-inch)				
	■or 1 billion colors (21.5-inch 4K)				
	■and: One 5120 by 2880 (5K) external display at 60Hz				
	with support for 1 billion colors				
	■or Two 3840-by-2160 (4K UHD) external displays				
	■at 60Hz with support for 1 billion colors				
	■or Two 4096 by 2304 (4K) external displays				
	■at 60Hz with support for millions of colors				
	I 🖴 GLOVIIZ WILLI SUDDULLIUL HIIIIUHS ULUUUNS	i		1	

	■Thunderbolt 3 digital video output				
	·				
	■Native DisplayPort output over USB C■Thunderbolt 2, HDMI, DVI,				
	and VGA output supported using adapters (sold separately) Audio Stores and loss.				
	Audio: Stereo speakers Audio: Stereo speakers				
	■Microphone				
	■3.5mm headphone jack				
	■Connections and Expansion: 3.5mm headphone jack				
	■SDXC card slot				
	■Four USB-A ports				
	■Two Thunderbolt 3 (USB-C) ports with support for: DisplayPort				
	■Thunderbolt (up to 40 Gbps)				
	■USB 3.1 Gen 2 (up to 10 Gbps)				
	■Thunderbolt 2, HDMI, DVI,				
	■and VGA supported using adapters (sold separately);				
	■10/100/1000BASE-T Gigabit Ethernet (RJ-45 connector);				
	■Kensington lock slot; Input: Magic Keyboard				
	■Magic Mouse 2				
	■Configurable with Magic Keyboard with Numeric Keypad				
	■Configurable with Magic Trackpad 2; Wireless: Wi-Fi				
	■802.11ac Wi-Fi wireless networking				
	■IEEE 802.11a/b/g/n compatible				
	■Bluetooth; Bluetooth 4.2 wireless technology				
	■Electrical and Operating Requirements: Line voltage: 100V				
	to 240V AC				
	■Frequency: 50Hz to 60Hz, single phase				
	■Operating temperature: 10° to 35° C				
	■Relative humidity: 5% to 90% noncondensing				
	■Operating altitude: tested up to 5,000 meters				
70	Desktop Computer	unit	1	40,000.00	40,000.00
	■IntelCorei5-at least 10th generation Processor 1.0 GHz		•	10,000.00	.0,000.00
	■6M Cache, up to 3.60 GHz or higher				
	■OS: Licensed Windows 10 Home				
	Memory: at least 8GB Onboard memory				
	Monitor: at least 21" LED-backlit FHD (1920x1080)				
	Casing with Power Suply				
	■USB Optical mouse and keyboard				
	■Storage: 512GB SSD + 1TB HDD				
	■600VA UPS, at most 4 hours charging time				
71	LAPTOP	unit	1	80,000.00	80,000.00
- ''-	Display Retina Display	unit	ı	00,000.00	00,000.00
	- 13.3 inch (diagonal) LED-backlit display with IPS				
	Technology: 2560 by 1600 native resolution at 227 pixels per				
	inch with support for million of colors				
	- Supported scaled resolutions:				
	1680 by 1050				
	1440 by 900				
	1024 by 640				
	- 400 nits brightness				
	- Wide color (P3)				
	- True tone technology				
	M1 chip				
L	p				

	- 8 core CPU with 4 performance cores and 4 efficiency				
	cores				
	- 8 core GPU				
	- 16 core Neural Engine				
	Battery and Power				
	- Up to 15 hours wireless web				
	- Up to 18 hours Apple TV app movie playback				
	- Built in 49.9 watt hour lithium polymer battery				
	- 30W USB-C Power Adapter				
	Charging and Expansion Two Thunderbolt/ USB 4 ports				
	with support for:				
	- Charging				
	- Display Port				
	- Thunderbolt 3 (up to 49Gb/s)				
	- USB 4 (up to 40Gb/s)				
	- USB 3.1 Gen 2 (up to 10Gb/s)				
	Memory 512GB				
	- 512GB unified memory				
	Configurable to				
	- 1TB or 2TB				
	Keyboard and Trackpad Backlit Magic Keyboard with:				
	- 78 (US) or 79 (ISO) keys including 12 function keys				
	and 4 arrows keys in an inverted T arrangement				
	- Ambient light sensor				
	 Force Touch trackpad for precise cursor control and pressure sensing capabilities: enables Force clicks, 				
	accelerators, pressure sensitive drawing and Multi-Touch				
	gestures				
	Touch ID				
	- Touch ID Sensor				
	Wireless WiFi				
	- 802.11 ax Wi-Fi 6 wireless networking				
	- IEEE 802.11 a/b/g/n/ac compatible				
	Bluetooth				
	- Bluetooth 5.0 wireless technology				
	Camera				
	- 720p Face Time HD camera				
	Video Support – Simultaneously supports full native resolution on the built-in display at millions of colors and				
	- One external display with up to 6K resolution at 60Hz				
	Thunderbolt 3 digital video output				
	- Native Display Port output over USB-C				
	 VGA, HDMI, DVI, and Thunderbolt 2 output supported 				
	using adapters				
	Audio				
	- Stereo speakers				
	- Wide stereo sound				
	- Support for Dolby Atmos playback				
	- Three-mic array with directional beamforming				
	- 3.5 mm headphone jack				
72	Programmable Logic Control (PLC) Trainer	рс	1	300,000.00	300,000.00
	■Package should consist of PLC Module with PLC				
	■Power Supply				
	■Programming and Operating System and Cables				

	■Installed with sensors				
	©Control Circuits				
	Drivers and Protection Circuits				
	Includes important accessories such as cords				
	Cables and softwares CD				
	©Can perform different experiments				
	 with different application related to Mechanical Engineering and other related fields 				
	■Free training to at least (3) Faculty Members				
	■With user and experiment manual and example exercices				
	With warranty and program of maintenance				
	■Free installation and product should be ready to use				
73	Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment	рс	1	300,000.00	300,000.00
	©Covers Electro Mechanics				
	©Electrical Machine and Drive				
	■Small and Special Electric Machine				
	Motor Control				
	■Relay Touch Control and Electrical Control				
	Suitable for motor and electrical technology training				
	Instrument and meters				
	■Dedicated Power Supply				
	Motors and Experimental components The description of the descriptio				
	■are connected by dedicated wires with removal bases				
	■easy to extend for new functions				
	■Internal and External Voltage				
	©Current Leakage Protection device to ensure				
	■the short circuit protection function of each power output				
	■All the motors are specially designed				
	with characteristics of power saving				
	energy saving				
	■low noise and etc.				
	■Each power output is designed				
	with monitoring and short-circuit protection function				
74	Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter	рс	5	20,000.00	100,000.00
	■A combined logic analyzer and pattern generator instrument				
	■with features to allow to debug				
	■visualize and simulate digital signals				
	■for most embedded projects				
	■digital inputs and outputs can be connected to a circuit				
	■ using simple wire probes or breadboard wires				
	■ with impedance-matched probes that can be used				
	■to connect and utilize inputs and outputs				
	■for more advanced projects				
	■with logic analyzer, pattern generator				
	■digital inputs and outputs				
	■power supply and protocol analyzer				
	■with high speed adapter				
	should include fly wire assembly				
	■and USB a to Micro-B scale				
	■Supports scripting interface				
	■allowing to create customize				

	■solution to more complex problems				
	■data can be exported to word & other tools				
75	Air Condition, Window Type, Inverter, 2HP, Standard size	рс	1	50,000.00	50,000.00
-10	■at least 12,000 kj/HrEER: at least 10.5 with remote control	Po		00,000.00	00,000.00
76	Ceiling fan	рс	2	2,500.00	5,000.00
	■Orbit typemetal blade 16"three speed controller	Po		2,000.00	0,000.00
77	Duplicating Machine	unit	1	75,000.00	75,000.00
	©copy printer	u.iii	·	7 0,000.00	1 0,000.00
	Indicate the state of the				
	■300x300 dpi, 60-90 sheets per minute,				
	■220-240 V, 50-60 Hz, includes ink black				
	■master and cabinet				
78	Document Scanner w/ ADF	unit	2	26,000.00	52,000.00
	■Flatbed Colored Document Scanner			.,	,
	■Combining a flatbed scanner with the convenience of a 50-				
	page ADF				
	■Quickly scan stacks of documents up to 8.5" x 14"				
	■Resolution: 1200 x 1200 dpi				
79	Comb Binding ring Machine	рс	1	22,000.00	22,000.00
	■for long Bond paper				
	■Punch Capacity: at least 15 sheets (80gsm)				
	■Bind Capacity: at least 380 sheets (80gsms)				
	■at least 24 holes				
	■Adjustable margin guide				
	■heavy duty,				
	■good quality				
80	Water Dispenser, Cabinet type	рс	2	10,000.00	20,000.00
	■Floor standingHot and cold functionplastic body				
	■high efficiency compressorthermally protected				
81	Electric fan	рс	1	2,500.00	2,500.00
	■Stand fan 16" metal bladeAdjustable heightthree speed controller				
82	Air condition, Window type, Inverter, 2.5 HP, Standard Size	рс	2	50,000.00	100,000.00
	■at least at least 24,000 BTUEER: at least 12.0With remote		_		,
	Control				
	REBIDDING				
83	Ink cartridge Cannon Pixma 810 black	pcs	22	800.00	17,600.00
84	Ink Cartridge Canon Pixma 811 Color	pcs	22	1,100.00	24,200.00
85	Ink, Brother BTD60BK, Black	btls	20	400.00	8,000.00
86	Ink, Brother BT5000C Cyan	btls	15	350.00	5,250.00
87	Ink, Brother BT5000M Magenta	btls	15	350.00	5,250.00
88	Ink, Brother BT5000Y Yellow	btls	15	350.00	5,250.00
89	Toner, NPG 67, Yellow for Canon C3320 Image Runner Advance (photocopier, printer/scanner) machine	рс	1	17,000.00	17,000.00
90	Surge suppressor 6 outlets	units	2	200.00	400.00
91	HP Laser Jet CP1025 color Imaging Drum	pcs	2	6,000.00	12,000.00
92	Netbook Laptop, Intel Celeron	unit	1	15,000.00	15,000.00
	■Intel® Celeron® Processor N3350 , up to 2.4GHz			·	·
	■Intel HD Graphics 500 GPU				
	■14.1 inch HD resolution				
	■4GB RAM for Advanced Multitasking				
	■128GB EMMC Storage Capacity				
	■38000mWh Large Battery				
•	· · · · · · · · · · · · · · · · · · ·	•		L	

	■Mini-HDMI Output & Two standard USB 3.0 Slot				
93	Computer Printer Continous, USB Port, w/ free lnk	unit	1	7,000.00	7,000.00
	■Max. Print Resolution: 720x720 dpi (w/ Variable-Sized				
	Droplet Technology)				
	■Paper Size: Letter, A4, Legal				
	■Print Speed: 8.5cpm (black), 4 5cpm (colored)				
	■Double-Sided Printing: Manual				
	■USB: USB 2.0				
	■Operating System Compatability Edition: Window XP/XP				
	Professional x64/				
	■Vista/7/8/8.1, Mac OS x 10.5.8, 10.6x, 10.7.x, 10.9.x				
	■Number of Paper Trays: 1				
	■Size: 18.1" x 8.5" x 5.1"				
	■Weight: 2.4kgs				
	■with Free Continue Inks				
		Tota	I ABC (for	this project):	3,657,129.00

Bids received in excess of the ABC for each item shall be automatically rejected at bid opening.

- 2. The *Visayas State University Main Campus* now invites bids for the above Procurement Project. Delivery of the Goods is required by *forty-five* (45) calendar days upon receipt of Notice to Proceed (NTP). Bidders should have completed, within two (2) years from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
- 3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

- 4. Prospective Bidders may obtain further information from *Visayas State University* and inspect the Bidding Documents at the address given below during *Mondays Fridays* (8:00 AM-5:00 PM).
- 5. A complete set of Bidding Documents may be acquired by interested Bidders on 27 April 17 May 2021 until 8:30 AM from the given address and website(s) below and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Five Thousand Pesos (PhP 5,000.00). The Procuring Entity shall allow the bidder to present its proof of payment for the fees in person, by facsimile, or through electronic means.
- 6. The Visayas State University Main Campus will hold a Pre-Bid Conference on May 4, 2021; 9:00 AM at the Cooperative Building, VSU Market, Visca, Baybay City,

Leyte and/or through video conferencing or webcasting via Google Meet, which shall be open to prospective bidders.

Bidders are advised to contact the BAC Secretariat before the scheduled Pre-Bid Conference for the Google Meet link.

- 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 17 May 2021 until 8:30 AM. Late bids shall not be accepted.
- 8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
- 9. Bid opening shall be on 17 May 2021; 9:00 AM at the Cooperative Building, VSU Market, Visca, Baybay City, Leyte and/or via Google Meet. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.

Bidders are advised to contact the BAC Secretariat before the scheduled Bid Opening for the Google Meet link.

- 10. For bidders who opt to submit their bids electronically, a hardcopy (original) of the bid must be sent to the BAC through couriers. A proof (e.g. courier receipt, etc.) that a hardcopy of the bid is on transit must be presented upon submission of the electronic bid.
- 11. The Visayas State University reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184. without thereby incurring any liability to the affected bidder or bidders.
- For further information, please refer to: 12.

Ms. Jessamine C. Ecleo (BAC Secretariat)

Office of the Head for Procurement, VSU-Main, Visca, Baybay City, Leyte

Mobile: 053 565 0600 local 1093 or 0998 555 0106

Email: jessamine.ecleo@vsu.edu.ph

or

Mr. Toni Marc L. Dargantes (BAC Secretariat)

Office of the VP for Planning, Resource Generation & Auxiliary Services

VSU-Main, Visca, Baybay City, Leyte

Mobile: 053 565 0600 local 1004 or 0977 7186594

Email: tmdargantes@vsu.edu.ph

13. You may visit the following websites: For downloading of Bidding Documents: https://www.vsu.edu.ph/philgepsopportunities

April 26, 2021

<u>DILBERTO O. FERRAREN</u> Chairperson, VSU BAC

Section II. Instructions to Bidders

1. Scope of Bid

The Procuring Entity, Visayas State University, wishes to receive Bids for the Supply and Delivery of Office and I.T. Equipment & Supplies, with identification number GOODS-21-22.

The Procurement Project (referred to herein as "Project") is composed of 92 items, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for 2021 in the amount of *Three Million Six Hundred Fifty-Seven Thousand One Hundred Twenty-Nine Pesos* (PhP 3,657,129.00).
- 2.2. The source of funding is: NGA, the General Appropriations Act (GAA), Special Appropriations, and Trust Fund.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

- 5.2. Foreign ownership limited to those allowed under the rules may participate in this Project.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:

Bidders should comply with the following requirements:

- i. Completed at least two (2) similar contracts, the aggregate amount of which should be equivalent to at least *fifty percent* (50%) of the ABC for this Project; and
- ii. The largest of these similar contracts must be equivalent to at least half of the percentage of the ABC as required above.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that: **Subcontracting is not allowed**.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time and either at its physical address and/or through videoconferencing/webcasting as indicated in paragraph 6 of the **IB.**

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII** (Checklist of Technical and Financial **Documents**).
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within **two** (2 years) prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII** (**Checklist of Technical and Financial Documents**).
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable);
 - ii. The cost of all customs duties and sales and other taxes already paid or payable;

- iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
- iv. The price of other (incidental) services, if any, listed in e.

b. For Goods offered from abroad:

- i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
- ii. The price of other (incidental) services, if any, as listed in **Section VII (Technical Specifications).**

13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in: Philippine Pesos.

14. Bid Security

- 14.1. The Bidder shall submit a Bid Securing Declaration or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.
- 14.2. The Bid and bid security shall be valid until *July 8, 2021*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

Each Bidder shall submit one copy of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

16. Deadline for Submission of Bids

16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB.**

17. Opening and Preliminary Examination of Bids

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

18. Domestic Preference

18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated "passed," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII** (**Technical Specifications**), although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows: One Project having several items, which shall be awarded as separate contracts per item.

19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

20.1. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

Section III. Bid Data Sheet

Bid Data Sheet

ITB						
Clause						
5.3	For this purpose, contracts similar to the Project shall be:					
3.3	For this purpose, contracts similar to the Project shall be:					
	a. Office and I.T. Equipment & Supplies					
	b.	completed within two (2) years price	r to th	a dandl	ing for the s	ubmission and
		receipt of bids.	10 11	e ueaui	ine for the s	uomission and
7.1	Subco	ntracting is not allowed.				
- 10						
12	_	rice of the Goods shall be quoted <i>DDI</i> plicable International Commercial Terr				
14.1	The bi	d security shall be in the form of a	Bid Se	ecuring	Declaration,	or any of the
		ing forms and amounts:		υ	,	J
		-				
	a.	The amount of not less than Seventy-	Three Z	Thousa	nd One Hund	red Forty-Two
		and 58/100 Pesos (PhP 73,142.58) o	r two p	ercent ((2%) of ABC ,	if bid security
		is in cash, cashier's/manager's check	, bank o	draft/gu	arantee or irr	evocable letter
		of credit; or				
	b.	The amount of not less than One			•	_
		Hundred Fifty-Six and 45/100 Pesos		82,856	.45) or five p	ercent (5%) of
		ABC if bid security is in Surety Bond.				
19.3	Item	u B	11. 14	01	450/11 11	T (4 D 0
	No.	Item Description & Specifications	Unit	Qty	ABC/Unit	Total ABC
	1	Toner, NPG 67	pcs	2	17,000.00	34,000.00
	2	Laptop 14" (i5)	unit	11	44,000.00	484,000.00
	3	Two-Way Radio Walkie Talkie	sets	2	5,000.00	10,000.00
	4	Ink, HP Designjet T770	set	1	22,000.00	22,000.00
	5	Desktop Microphone	pcs	4	650.00	2,600.00
	6	Desktop Computer (i7), Assembled, No Monitor	unit	1	50,000.00	50,000.00
	8	Desktop Computer (i3)	set	2	30,000.00	60,000.00
	9	Ink, Epson 003,Genuine Black 65mL	btl	17	350.00	5,950.00
	10	Ink, EPSON 003,Genuine Cyan 65mL	btl	14	350.00	4,900.00
	11	Ink, EPSON 003,Genuine Magenta 65mL	btl	14	350.00	4,900.00
	12	Ink, EPSON 003,Genuine Yellow 65mL	btl	14	350.00	4,900.00
	13	Ink, Epson, genuine (C) T664, 70 ml	pcs	10	350.00	3,500.00
	14	Ink, Epson, genuine (M) T664, 70 ml	pcs	10	350.00	3,500.00
	15	Ink, Epson, genuine, (Y) T664, 70 ml	pcs	10	350.00	3,500.00
	16	Ink, Epson, genuine, (BK) T664, 70 ml	pcs	23	350.00	8,050.00
	17	Mouse, Wired, Optical, USB	pcs	9	210.00	1,890.00
	18	USB Hub, 4 gangs	рс	1	250.00	250.00
	19	Unifi 500W PoE+ Switch	unit	1	35,000.00	35,000.00
	20	Wireless Access Point	unit	2	9,900.00	19,800.00
	21	Uninteruptible Power Supply Battery Backup	unit	1	10,000.00	10,000.00
	22	UTP Cable (300 meters per box)	box	1	7,000.00	7,000.00
	23	Desktop System Unit Only	unit	4	15,000.00	60,000.00

1		1			
24	Micro SD Card, 128 GB	pcs	2	1,500.00	3,000.00
25	Smart Phone, 128 GB ROM, 6GB RAM	unit	1	14,990.00	14,990.00
26	Computer Printer	unit	5	11,000.00	55,000.00
27	Speaker, for PC, 2.1 (Speaker with Subwoofer)	рс	1	2,000.00	2,000.00
28	External Hard Disk Drive	unit	2	5,500.00	11,000.00
29	HDMI to HDMI cable	рс	1	500.00	500.00
30	Automatic Voltage Regulator	pcs	2	8,000.00	16,000.00
31	Computer Printer	unit	1	14,900.00	14,900.00
32	AVR, 500W (IC Controlled)	unit	2	500.00	1,000.00
33	Flash Drive, at least 32GB USB 3.0	pcs	52	800.00	41,600.00
34	Netbook Laptop, Intel Celeron	unit	1	15,000.00	15,000.00
35	Computer Keyboard USB	pcs	4	400.00	1,600.00
36	EPSON L220 Ink Cartridge Black	btls	12	350.00	4,200.00
37	Laptop 14" (i3)	unit	1	33,000.00	33,000.00
38	Computer Webcam	pcs	7	1,000.00	7,000.00
39	Uninterruptible Power Supply, 1000 VA	unit	2	3,000.00	6,000.00
40	EPSON L220 Ink Cartridge Cyan	btls	2	350.00	700.00
41	EPSON L220 Ink Cartridge Magenta	btls	2	350.00	700.00
42	Digital Multimeter	рс	2	7,000.00	14,000.00
43	Video Card	unit	1	9,000.00	9,000.00
44	Printer	unit	3	8,000.00	24,000.00
46	UPS, at least 500 w	рс	1	2,550.00	2,550.00
47	LCD Projector, XGA (1024x768)	unit	1	27,000.00	27,000.00
48	Cartridge Ribbon, Genuine, Epson FX-1170	bxs	2	600.00	1,200.00
49	Computer Printer Ink, HP680 Cartridge, Black	pcs	10	500.00	5,000.00
50	Computer Printer Ink, HP680 Cartridge, Colored	pcs	10	500.00	5,000.00
51	Computer Printer Ink, HP678 Cartridge, Black	pcs	12	500.00	6,000.00
52	Computer Printer Ink, HP678 Cartridge, Colored	pcs	12	500.00	6,000.00
53	Computer Printer Ink, HP704 Cartridge, Black	pcs	50	500.00	25,000.00
54	Computer Printer Ink, HP704 Cartridge, Colored	pcs	50	500.00	25,000.00
55	Computer Ink	pcs	5	3,800.00	19,000.00
56	Ink, Epson, Genuine, (BK) T6641, 70ml	btls	11	400.00	4,400.00
57	Ink, Epson, Genuine, (C) T6642, 70ml	btls	11	400.00	4,400.00
58	Ink, Epson, Genuine, (M) T6643, 70ml	btls	11	400.00	4,400.00
59	Ink, Epson, Genuine, (Y) T6644, 70ml	btls	11	400.00	4,400.00
60	Wi-Fi Duplex All-in-One Ink Tank Printer	unit	1	15,000.00	15,000.00
61	Toner, NPG 67	pcs	3	14,000.00	42,000.00
62	Toner, NPG 67	pcs	2	17,000.00	34,000.00
63	Toner, NPG 67	pcs	2	17,000.00	34,000.00
64	External Hard Disk Drive (Portable, 1TB), USB 3.0	unit	3	3,800.00	11,400.00
65	Desktop Computer	unit	1	250,000.00	250,000.00
66	Smart Television	unit	4	75,000.00	300,000.00
68	Laptop	unit	1	64,000.00	64,000.00
69	All-in-One computer (Built-in components in the Monitor)	unit	1	92,999.00	92,999.00
70	Desktop Computer	unit	1	40,000.00	40,000.00
71	LAPTOP	unit	1	80,000.00	80,000.00
72	Programmable Logic Control (PLC) Trainer	рс	1	300,000.00	300,000.00
73	Motor and Electrical Technology	рс	1	300,000.00	300,000.00

		Trainer/Training Set for Educational Teaching Equipment				
	74	Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter	рс	5	20,000.00	100,000.00
	75	Air Condition, Window Type, Inverter, 2HP, Standard size	рс	1	50,000.00	50,000.00
		■at least 12,000 kj/HrEER: at least 10.5 with remote control				
	76	Ceiling fan	рс	2	2,500.00	5,000.00
	77	Duplicating Machine	unit	1	75,000.00	75,000.00
	78	Document Scanner w/ ADF	unit	2	26,000.00	52,000.00
	79	Comb Binding ring Machine	рс	1	22,000.00	22,000.00
	80	Water Dispenser, Cabinet type	рс	2	10,000.00	20,000.00
	81	Electric fan	рс	1	2,500.00	2,500.00
	82	Air condition, Window type, Inverter, 2.5 HP, Standard Size	рс	2	50,000.00	100,000.00
		REBIDDING				
	83	Ink cartridge Cannon Pixma 810 black	pcs	22	800.00	17,600.00
	84	Ink Cartridge Canon Pixma 811 Color	pcs	22	1,100.00	24,200.00
	85	Ink, Brother BTD60BK, Black	btls	20	400.00	8,000.00
	86	Ink, Brother BT5000C Cyan	btls	15	350.00	5,250.00
	87	Ink, Brother BT5000M Magenta	btls	15	350.00	5,250.00
	88	Ink, Brother BT5000Y Yellow	btls	15	350.00	5,250.00
	89	Toner, NPG 67, Yellow for Canon C3320 Image Runner Advance (photocopier, printer/scanner) machine	рс	1	17,000.00	17,000.00
	90	Surge suppressor 6 outlets	units	2	200.00	400.00
	91	HP Laser Jet CP1025 color Imaging Drum	pcs	2	6,000.00	12,000.00
	92	Netbook Laptop, Intel Celeron	unit	1	15,000.00	15,000.00
	93	Computer Printer Continous, USB Port, w/ free lnk	unit	1	7,000.00	7,000.00
					r this project):	3,657,129.00
20.2	submi	e the PhilGEPS Platinum Certificate ssion, it shall be submitted as a postection 34.2 of the 2016 Revised IRR of	t-qualifi	cation		
21.2	Not Ap	pplicable.				

Section IV.	General	Conditions	of	Contract
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1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC).**

2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.

4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC**, **Section IV** (**Technical Specifications**) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

5. Warranty

- 6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

Special Conditions of Contract

000	Special Conditions of Contract
GCC Clause	
1	Delivery and Documents –
	For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:
	The delivery terms applicable to this Contract are delivered <i>VSU Main Campus</i> , <i>Visca, Baybay City, Leyte</i> . Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination.
	Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements).
	For purposes of this Clause the Procuring Entity's Representative at the Project Site is:
	Ms. Alicia M. Flores Head, Supply and Property Management Office, VSU-Main, Visca, Baybay City, Leyte Contact #: 053 565 0600 local 1082 / 0917 6341 430
	Incidental Services –
	The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: a. performance or supervision of on-site assembly and/or start-up of the supplied Goods; b. furnishing of tools required for assembly and/or maintenance of the
	supplied Goods; c. furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
	d. performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
	e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
	The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

Spare Parts -

The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:

- a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- b. in the event of termination of production of the spare parts:
 - i. advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
 - ii. following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts and other components required are listed in **Section VI** (**Schedule of Requirements**) and the cost thereof is included in the contract price.

The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of 3 years.

Spare parts or components shall be supplied as promptly as possible, but in any case, within 1 month of placing the order.

Packaging -

The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.

The outer packaging must be clearly marked on at least four (4) sides as follows:

Name of the Procuring Entity Name of the Supplier Contract Description
Final Destination
Gross weight
Any special lifting instructions
Any special handling instructions
Any relevant HAZCHEM classifications

A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.

Transportation -

Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.

Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.

The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.

Intellectual Property Rights –

The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.

2.2	Payment shall be done upon full delivery of the items and compliance of all terms specified in the Purchase Order/Contract.
4	The inspections and tests that will be conducted will be specified by the appropriate technical team of VSU Main to confirm conformity to the contract specifications at no extra cost to VSU.

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item No.	Item Description & Specifications	Unit	Qty	Delivered, Weeks/Months
1	Toner, NPG 67	pcs	2	
2	Laptop 14" (i5)	unit	11	All Items Should Be Delivered
3	Two-Way Radio Walkie Talkie	sets	2	Within 45 Calendar Days From
4	Ink, HP Designjet T770	set	1	Receipt Of Notice To Proceed
5	Desktop Microphone	pcs	4	And Purchase Order
6	Desktop Computer (i7), Assembled, No Monitor	unit	1	
8	Desktop Computer (i3)	set	2	
9	Ink, Epson 003,Genuine Black 65mL	btl	17	
10	Ink, EPSON 003,Genuine Cyan 65mL	btl	14	
11	Ink, EPSON 003,Genuine Magenta 65mL	btl	14	
12	Ink, EPSON 003,Genuine Yellow 65mL	btl	14	
13	Ink, Epson, genuine (C) T664, 70 ml	pcs	10	
14	Ink, Epson, genuine (M) T664, 70 ml	pcs	10	
15	Ink, Epson, genuine, (Y) T664, 70 ml	pcs	10	
16	Ink, Epson, genuine, (BK) T664, 70 ml	pcs	23	
17	Mouse, Wired, Optical, USB	pcs	9	
18	USB Hub, 4 gangs	рс	1	
19	Unifi 500W PoE+ Switch	unit	1	
20	Wireless Access Point	unit	2	
21	Uninteruptible Power Supply Battery Backup	unit	1	
22	UTP Cable (300 meters per box)	box	1	
23	Desktop System Unit Only	unit	4	
24	Micro SD Card, 128 GB	pcs	2	
25	Smart Phone, 128 GB ROM, 6GB RAM	unit	1	
26	Computer Printer	unit	5	
27	Speaker, for PC, 2.1 (Speaker with Subwoofer)	рс	1	
28	External Hard Disk Drive	unit	2	
29	HDMI to HDMI cable	рс	1	
30	Automatic Voltage Regulator	pcs	2	
31	Computer Printer	unit	1	
32	AVR, 500W (IC Controlled)	unit	2	
33	Flash Drive, at least 32GB USB 3.0	pcs	52	
34	Netbook Laptop, Intel Celeron	unit	1	
35	Computer Keyboard USB	pcs	4	
36	EPSON L220 Ink Cartridge Black	btls	12	
37	Laptop 14" (i3)	unit	1	
38	Computer Webcam	pcs	7	
39	Uninterruptible Power Supply, 1000 VA	unit	2	
40	EPSON L220 Ink Cartridge Cyan	btls	2	
41	EPSON L220 Ink Cartridge Magenta	btls	2	
42	Digital Multimeter	рс	2	
43	Video Card	unit	1	
44	Printer	unit	3	
46	UPS, at least 500 w	рс	1	

47	LCD Projector, VCA (1004v760)	:1	1
47 48	LCD Projector, XGA (1024x768) Cartridge Ribbon, Genuine, Epson FX-1170	unit bxs	1 2
49	Computer Printer Ink, HP680 Cartridge, Black	-	10
	Computer Printer Ink, HP680 Cartridge, Black	pcs	
50	Colored	pcs	10
51	Computer Printer Ink, HP678 Cartridge, Black	pcs	12
52	Computer Printer Ink, HP678 Cartridge, Colored	pcs	12
53	Computer Printer Ink, HP704 Cartridge, Black	pcs	50
54	Computer Printer Ink, HP704 Cartridge, Colored	pcs	50
55	Computer Ink	pcs	5
56	Ink, Epson, Genuine, (BK) T6641, 70ml	btls	11
57	Ink, Epson, Genuine, (C) T6642, 70ml	btls	11
58	Ink, Epson, Genuine, (M) T6643, 70ml	btls	11
59	Ink, Epson, Genuine, (Y) T6644, 70ml	btls	11
60	Wi-Fi Duplex All-in-One Ink Tank Printer	unit	1
61	Toner, NPG 67	pcs	3
62	Toner, NPG 67	pcs	2
63	Toner, NPG 67	pcs	2
64	External Hard Disk Drive (Portable, 1TB), USB 3.0	unit	3
65	Desktop Computer	unit	1
66	Smart Television	unit	4
68	Laptop	unit	1
69	All-in-One computer (Built-in components in the Monitor)	unit	1
70	Desktop Computer	unit	1
71	LAPTOP	unit	1
	LAPTOP Programmable Logic Control (PLC) Trainer		-
71	LAPTOP	unit	1
71 72	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching	unit pc	1 1
71 72 73	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size	unit pc pc	1 1
71 72 73 74 75	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control	unit pc pc	1 1 5 1
71 72 73 74 75	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan	unit pc pc	1 1 5 1
71 72 73 74 75 76 77	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine	pc pc pc pc pc unit	1 1 1 5 1
71 72 73 74 75 76 77 78	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF	unit pc pc pc pc	1 1 1 5 1 2 1 2
71 72 73 74 75 76 77 78 79	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine	pc pc pc pc unit unit pc	1 1 1 5 1 2 1 2
71 72 73 74 75 76 77 78 79 80	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type	pc pc pc pc pc pc	1 1 1 5 1 2 1 2
71 72 73 74 75 76 77 78 79	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan	pc pc pc pc unit unit pc	1 1 1 5 1 2 1 2
71 72 73 74 75 76 77 78 79 80	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size	pc pc pc pc pc pc	1 1 1 5 1 2 1 2
71 72 73 74 75 76 77 78 79 80 81 82	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size REBIDDING	pc pc pc unit unit pc pc pc pc pc pc pc pc pc	1 1 1 5 1 2 1 2 1 2
71 72 73 74 75 76 77 78 79 80 81 82	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size REBIDDING Ink cartridge Cannon Pixma 810 black	pc pc pc pc unit unit pc	1 1 1 5 1 2 1 2 1 2
71 72 73 74 75 76 77 78 79 80 81 82	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size REBIDDING Ink cartridge Cannon Pixma 810 black Ink Cartridge Canon Pixma 811 Color	pc pc pc unit pc	1 1 5 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2 2
71 72 73 74 75 76 77 78 79 80 81 82 83 84 85	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size REBIDDING Ink cartridge Cannon Pixma 810 black Ink Cartridge Canon Pixma 811 Color Ink, Brother BTD60BK, Black	pc pc pc unit unit pc pc pc pc unit unit pc pc pc pc pc pc pc pc pc	1 1 1 5 1 2 1 2 1 2 1 2 2 2 2 2 22 20
71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size REBIDDING Ink cartridge Cannon Pixma 810 black Ink Cartridge Canon Pixma 811 Color Ink, Brother BTD60BK, Black Ink, Brother BT5000C Cyan	unit pc pc pc pc unit unit pc	1 1 1 5 1 2 1 2 1 2 1 2 2 2 2 22 20 15
71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size REBIDDING Ink cartridge Cannon Pixma 810 black Ink Cartridge Canon Pixma 811 Color Ink, Brother BT5000C Cyan Ink, Brother BT5000C Cyan Ink, Brother BT5000M Magenta	unit pc pc pc pc unit unit pc	1 1 1 1 5 1 2 1 2 1 2 1 2 2 2 2 2 2 2 2
71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86	Programmable Logic Control (PLC) Trainer Motor and Electrical Technology Trainer/Training Set for Educational Teaching Equipment Portable USB Logic Analyzer and Digital Pattern Generator with High Speed Adapter Air Condition, Window Type, Inverter, 2HP, Standard size ■at least 12,000 kj/HrEER: at least 10.5 with remote control Ceiling fan Duplicating Machine Document Scanner w/ ADF Comb Binding ring Machine Water Dispenser, Cabinet type Electric fan Air condition, Window type, Inverter, 2.5 HP, Standard Size REBIDDING Ink cartridge Cannon Pixma 810 black Ink Cartridge Canon Pixma 811 Color Ink, Brother BTD60BK, Black Ink, Brother BT5000C Cyan	unit pc pc pc pc unit unit pc	1 1 1 5 1 2 1 2 1 2 1 2 2 2 2 22 20 15

	Image Runner Advance (photocopier, printer/scanner) machine		
90	Surge suppressor 6 outlets	units	2
91	HP Laser Jet CP1025 color Imaging Drum	pcs	2
92	Netbook Laptop, Intel Celeron	unit	1
93	Computer Printer Continous, USB Port, w/	unit	1

Section VII. Technical Specifications

Technical Specifications

Item No.	Item Description & Specifications	STATEMENT OF COMPLIANCE
1	Toner, NPG 67	
	■Yellow for Canon C3320 Image Runner Advance	[Bidders must state here either
	■(photocopier. Printer/scanner) machine	"Comply" or "Not Comply" against
2	Laptop 14" (i5)	each of the individual parameters of
	■Processor:	each Specification stating the
	Intel Core i5-at least 10th Generation Processor	corresponding performance parameter
	◀1.0 GHz 6M Cache	of the equipment offered. Statements of
	■up to 3.60 GHz or higher	"Comply" or "Not Comply" must be
	■Operating system:	1 2
		supported by evidence in a Bidders
	■Memory:	Bid and cross-referenced to that
		evidence. Evidence shall be in the
	◀1 x SO-DIMM socket (for expansion)	form of manufacturer's un-amended
	Display:	sales literature, unconditional
	■14.0" (16:9)	statements of specification and
	■LED-backlit FHD (1920x1080)	compliance issued by the
	■60Hz Anti-Glare Panel with 45% NTSC	manufacturer, samples, independent
	■Video Processor:	test data etc., as appropriate. A
	■NVIDIA GeForce MX330	statement that is not supported by
	▼with 2GB GDDR5 VRAM	evidence or is subsequently found to
	Storage:	be contradicted by the evidence
	■512GB PCle Gen3 x2 SSD	presented will render the Bid under
3	Two-Way Radio Walkie Talkie	evaluation liable for rejection. A
	■NTC Registered	statement either in the Bidder's
	■Frequency Range: UHF 400-470 MHz	statement of compliance or the
	■RF Power: ≤ 5 W	supporting evidence that is found to be
	■Channel Capacity: 16 Channel	false either during Bid evaluation,
	■Spacing: 25 KHz	
	Oltage Operated: 3.7 V	post-qualification or the execution of
	■Battery: 1500 MAh Li-ion	the Contract may be regarded as
	■Frequency stability: ±. 5ppm	fraudulent and render the Bidder or
		supplier liable for prosecution subject
	■RF Output Power: 3 W	to the applicable laws and issuances.]
	■RF Output Power: 3 W	
	Modulation: F3E	
	Spurious Emission: ≤65dB	
	■Spurious Emission. ≥00db ■Audio Distortion: ≤5%	
	■Addio Distortion. ≤5% ■Transmitting Current: ≤1. 3A	
4	Ink, HP Designjet T770	
+	■HP 72 Photo black	
	■Cyan, Magenta, Gray, Matte Black■6 colors bundle	
5	Desktop Microphone	
	©Compatible with:	
	■ Desktop/Notebook/PC	
	▼Windows 7-10 compatible □ Pickum Grand Condenses Mice	
	■Pickup: 6mm Condenser Mic	

	<u>, </u>			
	■Microphone Directivity: Omnidirectional			
	■Sensitivity: -58db±3db			
	■ Signal-to-noise Ratio: ≤50dB			
	© Cable Length: 2.5m			
	■Type: 3.5mm Plug			
6	Desktop Computer (i7), Assembled, No Monitor			
	Intel Core i7 10th Generation or higher			
	■Motherboard:			
	Intel H310 Ultra Durable motherboard			
	■Anti-Sulfur Resistor			
	 ■LGA-1151			
	■Memory:			
	◀16GB DDR4 2400 DIMM Desktop Memory			
	■SSD: at least 500GB			
	■Video Card: Nvidia GTX 1650			
	■Operating System:			
	■Genuine Windows 10 Home (OEM)			
	■11.1 Volts 58 Whr 6 Cell Li-ion			
8	Desktop Computer (i3)			
	■Processor:			
	Intel Core i3-at least 10th Generation Processor			
	◄(9M Cache, up to 4.10 GHz) or higher			
	■Motherboard:			
	Intel H310 Ultra Durable motherboard			
	■Anti-Sulfur Resistor			
	◄ LGA-1151			
	Memory:			
	■8GB DDR4 2400 DIMM Desktop Memory			
	■SSD: 240GB			
	■Keyboard and Mouse Combo			
	■Monitor: at least 18.5 inch			
	◀HD Ready (1366 X 768)			
	■TN Panel Connectivity Port:			
	◀1 VGA Port			
	■1 HDMI Port / Aspect Ratio: 16:9			
	■Brightness (Typical):			
	■200 cd/m2 / Refresh Rate: 60 Hz			
	■Operating System:			
	■Genuine Windows 10 Home (OEM)			
	■AVR: 500W IC controlled			
9	Ink, Epson 003,Genuine Black 65mL			
10	Ink, EPSON 003, Genuine Cyan 65mL			
11	Ink, EPSON 003, Genuine Magenta 65mL			
12	Ink, EPSON 003, Genuine Yellow 65mL			
13	Ink, Epson, genuine (C) T664, 70 ml			
14	Ink, Epson, genuine (M) T664, 70 ml			
15	Ink, Epson, genuine, (Y) T664, 70 ml			
	,,,, (. /			

		_
16	Ink, Epson, genuine, (BK) T664, 70 ml	_
17	Mouse, Wired, Optical, USB	_
	■USB Port Connectivity	
	■Sensor: Optical	
	■DPI: 1600	4
	■Work method: Wired	
	Buttons:	
	■Left button	
	✓ right button	
	■Scroll wheel direction:	
	Two way	
	■Design highlights:	
	■Easy installation	
	■1600 DPI high-definition tracking engine	
	■Anti-slip scroll wheel	
	▼ Full-size	
18	USB Hub, 4 gangs	
19	Unifi 500W PoE+ Switch	
	■24 ports PoE+ Switch 500W	
	■Network Interfaces:	
	◄ (24) 10/100/1000 Mbps	
	■RJ45 Ethernet Ports (2)	
	■1 Gbps SFP Ethernet Ports	
	■Management Interface:	
	◄(1) RJ45 Serial Port Out-of-Band	
	■Ethernet In-Band	
	■Total Non-Blocking Throughput:	
	◄ 26 Gbps	
	■Switching Capacity: 52 Gbps	
	■Forwarding Rate: 38.69 Mpps	
	■MAC Address Table: 16384	
	■Maximum Aggregations: 6	
	■Monitoring Sessions 1	
	■Maximum VLANs 255	
	■Power Method:	
	◀100-240VAC/50-60 Hz	
	■Universal Input	
	■Power Supply AC/DC, Internal, 500W DC	
	■Max. Power Consumption	
	■Including PoE Output: 500W	
	■Excluding PoE Output: 30W	
	■ESD/EMP Protection Air:	
	◀± 24 kV, Contact: ± 24 kV	
	■Shock and Vibration:	7
	■ETSI300-019-1.4 Standard	1
	■Operating Temperature:	1
		1
		1
	◀5 to 95% Noncondensing	1
	©Certifications CE, FCC, IC	1
<u> </u>		1

	1	
	■PoE Interfaces PoE+ IEEE 802.3af/at:	
	◄ (Pins 1, 2+; 3, 6-)	
	■24VDC Passive PoE (Pins 4, 5+; 7, 8-)	
	■Max. PoE+ Wattage per Port by PSE 34.2W	
	■Voltage Range 802.3at Mode 50–57V	
	■Max. Passive PoE Wattage per Port 17W	
	■24V Passive PoE Voltage Range 20-27V	
	■Should be compatible	
	■with existing VSU Unifi Controller	
	■1 year warranty	
20	Wireless Access Point	
	■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	
	⋖ 5 GHz	
	◄ 23 dBm	
	◄ 26 dBm	
	■ MIMO	
	■ 2.4 GHz	
	⋖ 5 GHz	
	◄ 2x2	
	◄ 4x4	
	■Radio Rates	
	■ 2.4 GHz	
	⋖ 5 GHz	
	◄ 300 Mbps	
	41733 Mbps	
	■Antennas	
	■ 2.4 GHz	
	▼ 5 GHz	
	(2) Single-Port,	
	► Single-Polarity Antennas, 2.8 dBi each	
	✓ (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:	
	■Wireless Security. ■WEP	
	▼WEF ■WPA-PSK	
	■WPA-PSK ■WPA-Enterprise (WPA/WPA2, TKIP/AES)	
	■ WPA-Enterprise (WPA/WPAZ, TRIP/AES)	
	■BSSID 8 per Radio ■Mounting Wall/Ceiling (Kits Included)	
	■Operating Temperature:	

	T	1
	-10 to 70° C (14 to 158° F)	
	■5 to 95% Noncondensing	
	■Advanced Traffic Management	
	■VLAN 802.1Q	
	■Advanced QoS Per-User Rate Limiting	
	■Guest Traffic Isolation Supported	
	■WMM Voice, Video, Best Effort	
	■& 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	
	■Should be compatible	
	■with existing UniFi Controller	
21	Uninteruptible Power Supply Battery Backup	
	■1500VA/900w	
	■6 battery backup sockets	
	■USB, coax, phone/network, and serial ports	
	■Automatic Voltage Regulation (AVR)	
	■LCD screen	
	■at most 4 hours charging time	
22	UTP Cable (300 meters per box)	
	■UTP Cable cat6	
	■Cat 6 Cable UTP Unshielded AWG24	
	■Gray Data LAN Cable	
	■1000 feet 305m 1000ft.	
23	Desktop System Unit Only	
	■ (Pentium Gold G5400), Assembled	
	■Intel Pentium Gold G5400 or higher	
	■Intel H310 Chipset Ultra durable Motherboard	
	■8 GB DDR4 Memory or higher	
	■240 GB SSD	
	■Casing with 500W PSU or higher	
	■500W IC controlled AVR	
	■Keyboard and mouse combo	
24	Micro SD Card, 128 GB	
	■Memory SD Card:	
	◀128 GB UHS-I SDXC	
	■Storage Capacity: 128GB	
	■Storage Capacity: 128GB ■Bus type: UHS-1	

■ 170 MB/s Maximum (Burst) ■ Write speed: ■ 90 MB/s maximum (Burst) ■ Write speed: ■ 30 MB/s Minimum ■ Built-in Write Protect Switch ■ Durability: ■ Shockproof ■ Temperature Extremes ■ waterproof ■ X-ray Proof ■ Opening Temperature: ■ -25 to 85C 25 Smart Phone, 128 GB ROM, 6GB RAM ■ Super AMOLED ■ 6.2 to 6.4 inches ■ At least 1080 x 2400 pixels ■ 20:9 ratio (~411 ppi density) ■ Android 10, One UI 2.0 or higher ■ Mediatek MT6768 ■ Helio P65 (12nm) or higher ■ Mediatek MT6768 ■ Helio P65 (12nm) or higher ■ Mocta-core (2x2.0 GHz Cortex-A75) ■ 8.6x1.7 GHz Cortex-A55) or higher ■ MicroSDXC (dedicated slot) ■ Quad camera with At least 48 MP ■ 1/2.0", 0.8 μm ■ 1/2.0", 0.8 μm ■ 1/2.0", 0.8 μm ■ 1/2.0", 0.8 μm ■ 1/2.4 ■ ((ultrawide) ■ 1/4.0" ■ 1/4.4 ■ ((macro)at least 5 MP ■ 1/2.4 ■ ((macro)at least 5 MP ■ 1/2.4 ■ ((macro)at least 5 MP ■ 1/2.4 ■ ((macro)at least 5 MP) ■ 1/2.4			
■Write speed: ■30 MB/s Minimum ■Built-in Write Protect Switch ■Durability: ■Shockproof ■Temperature Extremes ■waterproof ■X-ray Proof ■Opening Temperature: ■-25 to 85C Smart Phone, 128 GB ROM, 6GB RAM ■Super AMOLED ■6.2 to 6.4 inches ■At least 1080 x 2400 pixels ■20:9 ratio (~411 ppi density) ■Android 10, One UI 2.0 or higher ■Mediatek MT6768 ■Helio P65 (12nm) or higher ■Octa-core (2x2.0 GHz Cortex-A75 ■8.6 x1.7 GHz Cortex-A55) or higher ■microSDXC (dedicated slot) ■Quad camera with At least 48 MP ■ff2.0, 26mm (wide) ■1/2.0", 0.8 μm ■PDA Fat least 8 MP ■ff2.4, (depth) ■At least 128GB storage, 6GB RAM ■Wi-Fi 802.11 a/b/g/n/ac ■dual-band ■Wi-Fi Direct, hotspot ■Yes, with A-GPS, GLONASS, GALILEO, BDS ■USB Type-C 2.0, USB On-The-Go ■At least 1:Po 5000 mAh, non-removable ■Fast charging at least 15W Computer Printer ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ■Print up to 8,100 pages in black ■and 6,500 in colour ■Next generation ink filling system: ■Enjoy hassle and mess-free refilis ■with the enhanced ink bottles		■170 MB/s Maximum (Burst)	
■Write speed: ■30 MB/s Minimum ■Built-in Write Protect Switch ■Durability: ■Shockproof ■Temperature Extremes ■Waterproof ■X-ray Proof ■Opening Temperature: ■25 to 85C 25 Smart Phone, 128 GB ROM, 6GB RAM ■Super AMOLED ■6.2 to 6.4 inches ■At least 1080 x 2400 pixels ■20:9 ratio (~411 ppi density) ■Android 10, One UI 2.0 or higher ■Mediatek MT6768 ■Helio P65 (12nm) or higher ■Octa-core (2x2.0 GHz Cortex-A75 ■8.6x1.7 GHz Cortex-A55) or higher ■microSDXC (dedicated slot) ■Quad camera with At least 48 MP ■1/2.0, 28mm (wide) ■1/2.0, 0.8 μm ■1/2.0, 1.33 ■(ultrawide) ■1/4.0" ■1.12 μmat least 5 MP ■1/2.4, (depth) ■At least 1080 storage, 6GB RAM ■Wi-Fi B02.11 alb/g/n/ac ■4ula-band ■Wi-Fi Direct, hotspot ■Yes, with A-GPS, GLONASS, GALILEO, BDS ■USB Type-C 2.0, USB On-The-Go ■At least 1-Po 5000 mAh, non-removable ■Fast charging at least 15W 26 Computer Printer ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ■Print up to 8,100 pages in black ■And 6,500 in colour ■Next generation ink filling system: ■Enjoy hassle and mess-free refilis ■with the enhanced ink bottles		⊚ Write speed:	
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■Built-in Write Protect Switch ■Durability: ■ Shockproof ■Temperature Extremes ■ waterproof ■X-ray Proof ■Opening Temperature: ■ 25 to 85C 25 Smart Phone, 128 GB ROM, 6GB RAM ■Super AMOLED ■6.2 to 6.4 inches ■At least 1080 x 2400 pixels ■ 20:9 ratio (~411 ppi density) ■Android 10, One UI 2.0 or higher ■Mediatek MT6768 ■ Helio P65 (12nm) or higher ■Octa-core (2x2.0 GHz Cortex-A75 ■ 8.6x1.7 GHz Cortex-A55) or higher ■microSDXC (dedicated slot) ■Quad camera with At least 48 MP ■ f/2.0, 26mm (wide) ■ 1/2.0", 0.8µm ■ PDA Fat least 8 MP ■ f/2.2, 123' ■ (ultrawide) ■ 1/2.1 unable least 5 MP ■ f/2.4 (depth) ■ At least 128GB storage, 6GB RAM ■ Wi-Fi Boz-11 a/b/g/n/ac ■ dual-band ■ Wi-Fi Direct, hotspot ■ Yes, with A-GPS, GLONASS, GALILEO, BDS ■ USB Type-C 2.0, USB On-The-Go ■ At least Larging at least 15W 26 Computer Printer ■ MI-in-one/Multifunction Colored Ink Tank ■ Ultra-low-cost printing: ■ Print up to 8,100 pages in black ■ and 6,500 in colour ■ Next generation ink filling system: ■ Enjoy hassle and mess-free refills ■ with the enhanced ink bottles		⊚ Write speed:	
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		■Built-in Write Protect Switch	
		■Durability:	
■waterproof ■X-ray Proof ®Opening Temperature: 4-25 to 85C Smart Phone, 128 GB ROM, 6GB RAM ®Super AMOLED 6-2 to 6.4 inches ®At least 1080 x 2400 pixels 420:9 ratio (~411 ppi density) ®Android 10, One UI 2.0 or higher ®Mediatek MT6768 4 Helio P65 (12nm) or higher ®Octa-core (2x2.0 GHz Cortex-A75 4& 6x1.7 GHz Cortex-A55) or higher ®microSDXC (dedicated slot) ©Quad camera with At least 48 MP 4f/2.0, 26mm (wide) 41/2.0", 0.8µm 4PDA Fat least 8 MP 4f/2.2, 123' 4(ultrawide) 41/4.0" 41/2.4 are (macro)at least 5 MP 4f/2.4 (depth) At least 128GB storage, 6GB RAM ®Wi-Fi 802.11 albig/in/ac 4 dual-band 4Wi-Fi Direct, hotspot WYes, with A-GPS, GLONASS, GALILEO, BDS ®USB Type-C 2.0, USB On-The-Go BAt least Li-Po 5000 mAh, non-removable ®Fast charging at least 15W Computer Printer BAII-in-one/Multifunction Colored Ink Tank WUItra-low-cost printing: 4-Print up to 8,100 pages in black 4-and 6,500 in colour ®Next generation ink filling system: 4-Enjoy hassle and mess-free refills 4-with the enhanced ink bottles		·	
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 ▼Wi-Fi Direct, hotspot ■Yes, with A-GPS, GLONASS, GALILEO, BDS ■USB Type-C 2.0, USB On-The-Go ■At least Li-Po 5000 mAh, non-removable ■Fast charging at least 15W Computer Printer ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ▼Print up to 8,100 pages in black ◄and 6,500 in colour ■Next generation ink filling system: ◄Enjoy hassle and mess-free refills ◄with the enhanced ink bottles 			
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 ■USB Type-C 2.0, USB On-The-Go ■At least Li-Po 5000 mAh, non-removable ■Fast charging at least 15W 26 Computer Printer ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ◄ Print up to 8,100 pages in black ◄ and 6,500 in colour ■Next generation ink filling system: ◄ Enjoy hassle and mess-free refills ◄ with the enhanced ink bottles 		·	
■At least Li-Po 5000 mAh, non-removable ■Fast charging at least 15W 26 Computer Printer ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ■Print up to 8,100 pages in black ■and 6,500 in colour ■Next generation ink filling system: ■Enjoy hassle and mess-free refills ■with the enhanced ink bottles			
■Fast charging at least 15W 26 Computer Printer ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ■Print up to 8,100 pages in black ■and 6,500 in colour ■Next generation ink filling system: ■Enjoy hassle and mess-free refills ■with the enhanced ink bottles		,,	
26 Computer Printer ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ■Print up to 8,100 pages in black ■and 6,500 in colour ■Next generation ink filling system: ■Enjoy hassle and mess-free refills ■with the enhanced ink bottles		· ·	
 ■All-in-one/Multifunction Colored Ink Tank ■Ultra-low-cost printing: ■Print up to 8,100 pages in black ■and 6,500 in colour ■Next generation ink filling system: ■Enjoy hassle and mess-free refills ■with the enhanced ink bottles 	00	3 3	
 ■Ultra-low-cost printing: ■Print up to 8,100 pages in black ■and 6,500 in colour ■Next generation ink filling system: ■Enjoy hassle and mess-free refills ■with the enhanced ink bottles 	26	·	
 ✓and 6,500 in colour ☑Next generation ink filling system: ✓Enjoy hassle and mess-free refills ✓with the enhanced ink bottles 		, ,	
■Next generation ink filling system:■Enjoy hassle and mess-free refills■with the enhanced ink bottles			
■Enjoy hassle and mess-free refills ■with the enhanced ink bottles		■and 6,500 in colour	
■with the enhanced ink bottles		■Next generation ink filling system:	
		■Enjoy hassle and mess-free refills	
⊚ Wi-Fi, Wi-Fi Direct & apps:		■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	
27	Speaker, for PC, 2.1 (Speaker with Subwoofer)	
	■Power Output : rms 4.5w×2 sw: 12w	
	■Signal to noise ratio : 80dba	
	■R/I: 300±50mv sw: 100 ± 20mv	
	■Aux/USB/SD card	
	■Bass driver :4 inch	
	■Treble driver :2 3/4 inch	
28	External Hard Disk Drive	
	⊚ (Portable, 2TB), USB 3.0	
	■Shock-absorbing silicon casing	
	■Interface: USB 3.1 (Max.5Gb/s)	
	■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	
29	HDMI to HDMI cable	
	■HDMI to HDMI cable/chord 1.8 meter long;	
30	Automatic Voltage Regulator	
	©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	
	·	—
24	Analog Volt Meter and Ammeter Computer Printer	
31	Computer Printer	
	©3-in-1	
	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 (C,M,Y)
	■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
32	AVR, 500W (IC Controlled)
	■Power Output: 500 W
	■Power Factor Correction (PFC):
	◆Active PFC with Value of 0.98
	■Fan Type:
	◀1 x 120 mm Smart
	■and Silent Fan Control 22 dBA
	Safety Standards:
	FCC, CB, CCC, TUV, CE, C-tick,
	■EMI, EMC, S-Intertek, CPT-AB15
33	Flash Drive, at least 32GB USB 3.0
34	Netbook Laptop, Intel Celeron
<u> </u>	■Intel® Celeron® Processor N3350
	■up to 2.4GHz
	■Intel HD Graphics 500 GPU
	■14.1 inch HD resolution
	■4GB RAM for Advanced Multitasking
	■128GB EMMC Storage Capacity
	■38000mWh Large Battery
	■Mini-HDMI Output
	■&Two standard USB 3.0 Slot
35	Computer Keyboard USB
-	Standard Keyboard with 104 Keys
	Standard Reyboard with 104 Reys Supplies Connection
	■ Low Profile Key Caps
	Minimum Key Noise
	■ Laser Printing for Key Layout
	Spill Resistant Design
36	EPSON L220 Ink Cartridge Black
36 37	
<i>ا</i> د	Laptop 14" (i3) Processor :
	■up to 3.40 GHz or higher ■ Connection System
	©Operating System :
	Memory: MACO Onboard recovery
	■4GB Onboard memory
	◀1 x SO-DIMM socket

	◆total up to 8 GB SDRAM	
	■Display : 14.0" (16:9)	
	■LED-backlit HD (1366x768)	
	■60Hz Anti-Glare	
	■Panel with 45% NTSC	
	⊚ Graphics :	
	Integrated Intel UHD Graphics	
	■Storage:	
	■512GB PCle Gen3 x2 SSD	
	■Networking:	
	Integrated Wi-Fi 5 (802.11 ac)	
	■Bluetooth 5.0	
	■Battery :	
	■2 -Cell 32 Wh lithium-polymer battery	
38	Computer Webcam	
39	Uninteruptible Power Supply, 1000 VA	
	■1000VA/600W capacity	
	■Frequency Range: 60 Hz	
	■Freq. Range (Batt. Mode): 60 Hz ± 1 Hz	
	■Transfer Time: Typical 4-8 ms	
	■Waveform (Batt. Mode): Simulated Sine Wave	
	■Back-up Runtime: 10-15 mins	
	■Voltage: 220 VAC	•
	■Voltage Range: 162-270 VAC	
40	EPSON L220 Ink Cartridge Cyan	•
41	EPSON L220 Ink Cartridge Magenta	
42	Digital Multimeter	-
	■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
	■1.5V battery only	-
	■Display numeral display: 4000	-
	Sampling rate: 3 times/sec.	1
	■Bandwidth: 40~400Hz (Sine wave)	1
	©Fuse:	1
	■ 0.5A/1000V 30kA Φ6.35×32mm	-
	■10A/1000V 30kA Φ10×38mm	-
	■Battery: R6Px2	-
	Battery life:	-
	■Approx.400h (manganese battery)	-
		-
	■.III 600V/CAT. II 1000VDCV:	-
	▼.Ⅲ0000V/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)	7
	■Fuse:	1
	◄ 0.5A/1000V 30kA Φ6.35×32mm	
	■ 10A/1000V 30kA Φ10×38mm	
	■Battery: R6Px2	
	■Battery life:	
	■Approx.400h (manganese battery)	
	■Safety: IEC61010CAT.Ⅲ600V/CAT.Ⅱ1000V	
43	Video Card	
	■CUDA Cores at least 768	
	■Core Speed: at least 1290 MHz ■Core Speed: at least 1290 MHz	
	■Boost Speed: at least 1392 MHz	
	■Memory Size: at least 4GB GDDR5	
	■Memory Interface: at least 128-bit	
	■Memory Frequency: at least 7 Gbps	
	■TDP: at least 75 Watts	
	■Multi-Screen Support: Yes	
	■Resolution:7680X4320@60hz Digital	1
	■Bus Type: PCI Express 3.0 16x	1
44	Printer	7
<u> </u>	■Tank Ink System	7
	■Printer Type:	1
	■Print, Scan and Copy	1
	Scanner Type:	1
	■Flatbed colour image scanner	1
	Sensor Type: CIS	1
	Optical Resolution:	1
	 ■600 x 1200 dpi	1
	■Copy Speed:	1
	■ Maximum Copies from Standalone: 20 copies	1
	■Maximum Copy Size: A4, Letter	1
	■ISO 29183	1
	■A4 Simplex Flatbed (Black / Colour):	
	■Up to 7.0 ipm / 1.7 ipm	
	■Max Copy Resolution:	
	Emian Copy Nooviation.	

	◄ 300 x 300 dpi	
	■Paper Handling:	
	■Up to 20 sheets-Premium Glossy Photo Paper	
	■10 sheets-Envelope, 30 sheets-Postcard	
	■Output Capacity:	
	■Up to 30 sheets, A4 plain paper	
	■20 sheets, Premium Glossy Photo Paper	
	■Maximum Paper Size:	
	◀215.9 x 1200 mm (8.5 x 47.24")	
	■Paper Size:	
	 ■Legal	
	Indian-Legal (215 x 345 mm)	
	■8.5 x 13", Letter, A4, 16K (195 x 270 mm),	
	■B5, A5, B6, A6, Hagaki (100 x 148 mm)	
	√5 x 7", 4 x 6", Envelopes: #10, DL, C6	
	■Print Margin:	
	■0 mm top, left, right	
	■bottom via custom settings in printer driver	
	■Nozzle Configuration:	
	■180 x 1 nozzles Black	
	√59 x 1 nozzles per colour (C,Y,M)	
	■Print Direction: Bi-directional printing	
	■Maximum Print Resolution:	
	◄ 5760 x 1440 dpi	
	► (with Variable-Sized Droplet Technology)	
	◄ 5760 x 1440 dpi	
	► (with Variable-Sized Droplet Technology)	
	■Minimum Ink Droplet Size: 3 pl	
	■Printer Language: ESC / P-R	
46	UPS, at least 500 w	
47	LCD Projector, XGA (1024x768)	
	■Power Consumption	
	■282 Watt, 203 Watt (economy)	
	■0.2 Watt (standby)	
	◆On mode power consumption as defined	
	◀in JBMS-84 257 Watt	
	■Supply Voltage	
	◀AC 100 V - 240 V, 50 Hz - 60 Hz	
	■Product Dimensions	
	■302 x 237 x 82 mm (Width x Depth x Height)	
	■Product weight	
	◄ 2.5 kg	
	■Noise Level	
	Normal: 37 dB (A) - Economy: 28 dB (A)	
	Supported Temperature	
	◆Operation 5° C - 35° C, Storage -10° C - 60° C	
	Supported Humidity	
	■Operation 20% - 80%, Storage 10% - 90%	
	■Included Software	
	■iProjection	
	©Options	
		i

■Loudspeaker		
■What's in the box		■Loudspeaker
■Carrying Case ■Computer cable ■Main unit ■Power cable ■Quick Start Guide ■Remote control incl. batteries ■User manual (CD) ■Room Type / Application ■Home Office ■Home Photo ■Streaming ■TV & Box sets ■Positioning ■Ceiling Mounted, Desktop ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP678 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (Y) T6642, 70ml 58 Ink, Epson, Genuine, (W) T6643, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Print Method:		■ 2 Watt
		■ What's in the box
■Main unit ■Power cable ■Quick Start Guide ■Remote control incl. batteries ■User manual (CD) ■Warranty card ■Room Type / Application ■Home Office ■Home Photo ■Streaming ■TV & Box sets ■Positioning ■Ceiling Mounted, Desktop ■Colour ■White White ■White White ■Cartridge Ribbon, Genuine, Epson FX-1170 ■Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP680 Cartridge, Colored 52 Computer Printer Ink, HP784 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Printer Ink, HP704 Cartridge, Colored 56 Computer Ink Epson, Genuine, (BK) T6641, 70ml 1nk, Epson, Genuine, (C) T6642, 70ml 1nk, Epson, Genuine, (C) T6644, 70ml 1nk, Epson, Genuine, (M) T6643, 70ml 1nk, Epson, Genuine, (M) T6643, 70ml 1nk, Epson, Genuine, (M) T6644, 70ml 1nk, E		
		Computer cable
■Quick Start Guide ■Remote control incl. batteries ■User manual (CD) ■Warranty card ■Room Type / Application ■Home Office ■Home Photo ■Streaming ■TV & Box sets ■Positioning ■Colour ■White ■White ■White ■Computer Printer Ink, HP680 Cartridge, Black Computer Printer Ink, HP680 Cartridge, Black Computer Printer Ink, HP680 Cartridge, Colored Computer Printer Ink, HP678 Cartridge, Black Computer Printer Ink, HP678 Cartridge, Colored Computer Printer Ink, HP704 Cartridge, Colored Computer Ink HP704 Cartridge, Colored Computer Ink HP704 Cartridge, Colored Computer Ink HP Laserjet P1102 ■Color Black 85A Ink, Epson, Genuine, (C) T6642, 70ml Ink, Epson, Genuine, (M) T6643, 70ml Ink, Epson, Genuine, (M) T6644, 70ml Ink, Epson, Genuine, (M) T6644, 70ml Mi-Fi Duplex All-in-One Ink Tank Printer ■Prints Type: ■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 per colour (Cyan, Magenta, Yellow) ■Maximum Resolution: ■5760 x 1440 dpi ► (with Variable-Sized Droplet Technology)		Main unit
■Remote control incl. batteries ■User manual (CD) ■Warranty card ■Room Type / Application ■Home Office ■Home Photo ■Streaming ■TV & Box sets ■Positioning ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 Computer Printer Ink, HP680 Cartridge, Black Computer Printer Ink, HP680 Cartridge, Colored 50 Computer Printer Ink, HP678 Cartridge, Black Computer Printer Ink, HP678 Cartridge, Black Computer Printer Ink, HP704 Cartridge, Colored Computer Ink ■HP Laserjet P1102 ■Color Black 85A Ink, Epson, Genuine, (BK) T6641, 70ml Ink, Epson, Genuine, (C) T6642, 70ml Ink, Epson, Genuine, (M) T6643, 70ml Ink, Epson, Genuine, (Y) T6644, 70ml Wi-Fi Duplex All-in-One Ink Tank Printer ■Print Duplex All-in-One Ink Tank Printer ■Print Type: ■Print Method: ■On-demand inkjet (piezoelectric) ■Minimum Ink Droplet Volume: ■3 pl ■Print Direction: ■Print Direction: ■Brint Configuration: ■180 nozzles Black ■459 nozzles per colour (Cyan, Magenta, Yellow) ■Maximum Resolution: ■5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology)		◆Power cable
■ User manual (CD) ■ Warranty card ■ Room Type / Application ■ Home Office ■ Home Photo ■ Streaming ■ TV & Box sets ■ Positioning ■ Ceiling Mounted, Desktop ■ Colour ■ White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■ HP Laserjet P1102 ■ Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (M) T6643, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (M) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■ Print Type: ■ Print Scan & Copy ■ Print Method: ■ On-demand inkjet (piezoelectric) ■ Minimum Ink Droplet Volume: ■ 3 pl ■ Printe Language: ■ ESC / P-R ■ Print Direction: ■ Misidirectional printing, Uni-directional printing ■ Nozzle Configuration: ■ 180 nozzles Black ■ 459 nozzles per colour (Cyan, Magenta, Yellow) ■ Maximum Resolution: ■ 5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology)		Quick Start Guide
■Room Type / Application ■Home Office ■Home Photo ■Streaming ■TV & Box sets ■Positioning ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Black 51 Computer Printer Ink, HP678 Cartridge, Colored 52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Printer Ink, HP704 Cartridge, Colored 66 Computer Printer Ink, HP704 Cartridge, Colored 67 Computer Na ■HP Laserjet P1102 ■Color Black 85A 68 Ink, Epson, Genuine, (BK) T6641, 70ml 69 Ink, Epson, Genuine, (M) T6643, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■Print Method: ■On-demand inkjet (piezoelectric) ■Minimum Ink Droplet Volume: ■3 pl ■Printer Inguage: ■ESC / P-R ■Print Direction:		
■Room Type / Application ■Home Office ■Home Photo ■Streaming ■TV & Box sets ■Positioning ■Ceiling Mounted, Desktop ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Colored 52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Printer Ink, HP704 Cartridge, Colored 56 Computer Printer Ink, HP704 Cartridge, Colored 57 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 58 Ink, Epson, Genuine, (BK) T6641, 70ml 59 Ink, Epson, Genuine, (C) T6642, 70ml 10 Ink, Epson, Genuine, (M) T6643, 70ml 10 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Print Scan & Copy ■Print Method: ■On-demand inkjet (piezoelectric) ■Minimum Ink Droplet Volume: ■3 pl ■Printer Language: ■ESC / P-R ■Print Direction: ■ESC / P-R ■Print Direction: ■Isi-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)		■User manual (CD)
■Home Office ■Home Photo ■Streaming ■TV & Box sets ■Positioning ■Collour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■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 Config		■Warranty card
■Home Photo Streaming TV & Box sets ■Positioning ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP678 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■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)		■Room Type / Application
■TV & Box sets ■Positioning ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■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)		■Home Office
■TV & Box sets ■Positioning ■Coling Mounted, Desktop ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Print, Scan & Copy ■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 ■5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology)		■Home Photo
■Positioning		≺Streaming
■Ceiling Mounted, Desktop ■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP678 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Black 53 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print Nethod: ■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 plack ■59 nozzles per colour (Cyan, Magenta, Yellow) ■Maximum Resolution: ■5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology)		▼TV & Box sets
■Colour ■White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 16 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)		■Positioning
◄White 48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP704 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Colored 54 Computer Ink ♣HP Laserjet P1102 ♣Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ♠Print Type: ♣Print, Scan & Copy ♠Print Method: ♣On-demand inkjet (piezoelectric) ♠Minimum Ink Droplet Volume: ♣3 pl ♣3 pl ♠Printer Language: ♣ESC / P-R ♠Print Direction: ♣Bi-directional printing, Uni-directional printing ♠Nozzles Black ♣180 nozzles Black ♣59 nozzles per colour (Cyan, Magenta, Yellow) ♠Maximum Resolution: ♣5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology)		·
48 Cartridge Ribbon, Genuine, Epson FX-1170 49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■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 ■Nozzles Black ■59 nozzles per colour (Cyan, Magenta, Yellow) ■Maximum Resolution: ■15760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology)		-
49 Computer Printer Ink, HP680 Cartridge, Black 50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)		⋖White
50 Computer Printer Ink, HP680 Cartridge, Colored 51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)	48	Cartridge Ribbon, Genuine, Epson FX-1170
51 Computer Printer Ink, HP678 Cartridge, Black 52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)	49	Computer Printer Ink, HP680 Cartridge, Black
52 Computer Printer Ink, HP678 Cartridge, Colored 53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)	50	Computer Printer Ink, HP680 Cartridge, Colored
53 Computer Printer Ink, HP704 Cartridge, Black 54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)	51	Computer Printer Ink, HP678 Cartridge, Black
54 Computer Printer Ink, HP704 Cartridge, Colored 55 Computer Ink ■HP Laserjet P1102 ■Color Black 85A 56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (M) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)	52	Computer Printer Ink, HP678 Cartridge, Colored
55 Computer Ink	53	Computer Printer Ink, HP704 Cartridge, Black
■HP Laserjet P1102 Color Black 85A Ink, Epson, Genuine, (BK) T6641, 70ml Ink, Epson, Genuine, (M) T6643, 70ml Ink, Epson, Genuine, (Y) T6644, 70ml Wi-Fi Duplex All-in-One Ink Tank Printer ●Printer Type: ■Print, Scan & Copy ●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: ✓160 x 1440 dpi ► (with Variable-Sized Droplet Technology)	54	Computer Printer Ink, HP704 Cartridge, Colored
 【Color Black 85A Ink, Epson, Genuine, (BK) T6641, 70ml Ink, Epson, Genuine, (C) T6642, 70ml Ink, Epson, Genuine, (M) T6643, 70ml Ink, Epson, Genuine, (Y) T6644, 70ml Wi-Fi Duplex All-in-One Ink Tank Printer Printer Type: 【Print, Scan & Copy 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) 	55	Computer Ink
56 Ink, Epson, Genuine, (BK) T6641, 70ml 57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer		◄HP Laserjet P1102
57 Ink, Epson, Genuine, (C) T6642, 70ml 58 Ink, Epson, Genuine, (M) T6643, 70ml 59 Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)		Color Black 85A
Ink, Epson, Genuine, (M) T6643, 70ml Ink, Epson, Genuine, (Y) T6644, 70ml Wi-Fi Duplex All-in-One Ink Tank Printer Printer Type: Print, Scan & Copy 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)	56	Ink, Epson, Genuine, (BK) T6641, 70ml
Ink, Epson, Genuine, (Y) T6644, 70ml 60 Wi-Fi Duplex All-in-One Ink Tank Printer ■Printer Type: ■Print, Scan & Copy ■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)	57	Ink, Epson, Genuine, (C) T6642, 70ml
60 Wi-Fi Duplex All-in-One Ink Tank Printer	58	Ink, Epson, Genuine, (M) T6643, 70ml
 ■Printer Type: ■Print, Scan & Copy ■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) 	59	Ink, Epson, Genuine, (Y) T6644, 70ml
 ✓ Print, Scan & Copy ☑ 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: ✓ 1760 x 1440 dpi ☑ (with Variable-Sized Droplet Technology) 	60	Wi-Fi Duplex All-in-One Ink Tank Printer
 ■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) 		■Printer Type:
 ◆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) 		■Print, Scan & Copy
 ■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) 		
■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)		■On-demand inkjet (piezoelectric)
 ■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) 		■Minimum Ink Droplet Volume:
 ✓ESC / P-R ⑤Print Direction: ✓Bi-directional printing, Uni-directional printing ⑥Nozzle Configuration: ✓180 nozzles Black ✓59 nozzles per colour (Cyan, Magenta, Yellow) ⑥Maximum Resolution: ✓5760 x 1440 dpi ﴾ (with Variable-Sized Droplet Technology) 		◀ 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) 		■Printer Language:
■ 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)		■ ESC / P-R
 ■Nozzle Configuration: ■180 nozzles Black ■59 nozzles per colour (Cyan, Magenta, Yellow) ■Maximum Resolution: ■5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology) 		■Print Direction:
 ■180 nozzles Black ■59 nozzles per colour (Cyan, Magenta, Yellow) ■Maximum Resolution: ■5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology) 		■Bi-directional printing, Uni-directional printing
 ■59 nozzles per colour (Cyan, Magenta, Yellow) ■Maximum Resolution: ■5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology) 		■Nozzle Configuration:
 ■Maximum Resolution: ■5760 x 1440 dpi ▶ (with Variable-Sized Droplet Technology) 		
■5760 x 1440 dpi▶ (with Variable-Sized Droplet Technology)		√59 nozzles per colour (Cyan, Magenta, Yellow)
► (with Variable-Sized Droplet Technology)		
		⋖ 5760 x 1440 dpi

	T	
	✓Yes (up to A4)	
	■Print Speed	
	◄Photo Default - 10 x 15 cm / 4 x 6 " *2:	
	► 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	
	ISO 24734, A4 Duplex (Black / Colour):	
	► Up to 6.0 ipm / 4.0 ipm *1	
61	Toner, NPG 67	
	■Black for Canon C3320 Image Runner Advance	
	⊚ (photocopier, printer/scanner) machine	
62	Toner, NPG 67	
	■Cyan for Canon C3320 Image Runner Advance	
	(photocopier, printer/scanner) machine	
63	Toner, NPG 67	
	■Magenta for Canon C3320 Image Runner advance	
	⊚ (photocopier, printer/scanner) machine	
64	External Hard Disk Drive (Portable, 1TB), USB 3.0	
65	Desktop Computer	
	■Processor: AMD Ryzen 9 5900X	
	■Graphics coprocessor: NVIDIA GeForce RTX 3090	
	■Chipset: AMD X570 Chipset	
	■Memory: 16GB DDR4-3200 LO-DIMM x 2	
	■SATA: 8 x SATA 6.0Gb/s ports	
	Storage:	
	■2TB SATA 7200RPM 3.5" HDD	
	■1TB M.2 NVMe [™] PCle® 3.0 Performance SSD	
	■Operating System: Licensed Windows 10 Pro	
	■Front I/O Ports:	
	■2x USB 3.2 Gen 1 Type-A	
	■2x USB 3.2 Gen 1 Type-C	
	■1x Headphone	
	■1x Nicrophone	
	■Rear I/O Ports:	
	■A4x USB 3.2 Gen 1 Type-A	
	■1x USB 3.2 Gen 1 Type-A	
	◄ 1x USB 3.2 Gen 2 Type-C	
	■1x Mic-in	
	■1x Nilc-III ■1x Rear Speaker Out	
	■1x Real Speaker Out ■1x Center / Sub Woofer	
	■1x RJ45 Gigabit Ethernet	
	■2x HDMI-Out	
	■1x DisplayPort	
	■Expansion Slots:	
	■ 2 x PCle® 4.0 x1	
	■3 x PCle® 4.0 x16	

	■2 x M.2 connector for SSD
	◀4 x DDR4 U-DIMM Slots
	■Audio: SupremeFX S1220A CODEC
	Network and communication: Wi-Fi 5 (802.11ac)+Bluetooth
	5.0 (Dual band) 2*2
	Power Supply: 700W 80 PLUS (GOLD)
	■Weight: 15.0 kg
	■Dimensions (W x D x H): 27.90 x 43.30 x 50.10 cm
	■VGA Installation Type: Vertical
	■Monitor: 34" Ultra WQHD Monitor
66	Smart Television
	■Screen Size: 65"
	■Resolution: 3,840 × 2,160
	■Picture Engine: UHD Upscaling
	■Motion Rate: 120
	■PQI (Picture Quality Index): 1400
	■HDR (High Dynamic Range)
	■Dynamic Contrast Ratio: Mega Contrast
	■Micro Dimming: UHD Dimming
	■PurColor, Auto Depth Enhancer
	■Auto Motion Plus, Film Mode
	■Dolby Digital Plus, DTS Codec
	■Sound Output (RMS): 20W
	■Speaker Type: 2CH(Down Firing w/Bass Reflex)
	■Multiroom Link, Web Browser, Smart View
	■TV to Mobile – Mirroring
	■Mobile to TV - Mirroring, DLNA
	■360 Video Player, WiFi Direct, Analog Clean View
	■Digital Broadcasting: ISDB-T
	■Analog Tuner: Yes; HDMI: 3
	■USB: 2
	©Component In (Y/Pb/Pr): 1
	©Composite In (AV): 1(Common Use for Component Y)
	■Ethernet (LAN): Yes
	■Digital Audio Out (Optical): 1
	■RF In (Terrestrial / Cable input): 1/1(Common Use for
	Terrestrial)/0
	■HDMI A / Return Ch. Support
	■HDMI Quick Switch, Wireless LAN Built-in, Anynet+ (HDMI-
	CEC)
	■Slim Type: Slim
	Stand Type: V-Shape
	■Instant On: Yes
	■Processor: Quad Core
	■Accessibility: Voice guide(AU English)/ Enlarge/ High
	contrast/ Learn TV Remote(AU English)
	■Digital Clean View, Auto Channel Search, Auto Power Off
	©Caption (Subtitle), Connect Share™ (HDD),
	ConnectShare™ (USB 2.0), Embeded POP ■EPG, Extended PVR, USB HID Support, Ultra Clean View,
	Eco Sensor
	■Power Supply: AC100-240V 50/60Hz
	Power Consumption (Max): 265W
	■Package Size (WxHxD): 1617 x 980 x 255 mm
	E GONGGO OIZO (*** IND). 1011 A 000 A 200 IIIIII

	■Set Size with Stand (WxHxD): 1460.3 x 907.2 x 369.1 mm
	■Set Size without Stand (WxHxD): 1460.3 x 845.8 x 131.1
	mm
	■Package Weight: 36.70 kg
	■Set Weight with Stand: 28.30 kg
	Set Weight without Stand: 26.1 kg
	■Accessory: Remote Controller
	■Batteries, Mini Wall Mount Support, Vesa Wall Mount
	Support, User Manual
	■E-Manual, Power Cable, Slim Gender Cable
68	Laptop
	■OS: Licensed Windows 10
	■Processor: Intel Corei7 at least 10th gen CPU
	■RAM: at least 8 GB
	■System: 64 bit OS x 64 based processor
	■Wifi, bluetooth, Camera
	■HDD: 1 TB or Higher + 512 SSD or higher
	Weight: at most 1.85
69	All-in-One computer (Built-in components in the Monitor)
	■Display: 21.5-inch (diagonal) LED backlit display
	■1920 by 1080 resolution with support for millions of colors
	■Processor: 3.2GHz 6 core Intel Core i7, Turbo Boost up to
	4.6GHz
	■Memory: 16GB of 2400MHz DDR4 memory
	Storage: 256GB SSD with 1TB Fusion Drive
	■Graphics: Radeon Pro 555X with 2GB of GDDR5 memory
	■Video Support and Camera: FaceTime HD camera
	■Simultaneously supports full native resolution on the built in display
	■at millions of colors (21.5-inch)
	or 1 billion colors (21.5-inch 4K)
	■and: One 5120 by 2880 (5K) external display at 60Hz
	with support for 1 billion colors
	or Two 3840-by-2160 (4K UHD) external displays
	■at 60Hz with support for 1 billion colors
	or Two 4096 by 2304 (4K) external displays
	■at 60Hz with support for millions of colors
	■Thunderbolt 3 digital video output
	■Native DisplayPort output over USB C
	■Thunderbolt 2, HDMI, DVI,
	■and VGA output supported using adapters (sold separately)
	■Audio: Stereo speakers
	■Microphone
	■3.5mm headphone jack
	■Connections and Expansion: 3.5mm headphone jack
	■SDXC card slot
	■Four USB-A ports
	■Two Thunderbolt 3 (USB-C) ports with support for:
	DisplayPort
	■Thunderbolt (up to 40 Gbps)
	■USB 3.1 Gen 2 (up to 10 Gbps)
	■Thunderbolt 2, HDMI, DVI,
	■and VGA supported using adapters (sold separately);

	■10/100/1000BASE-T Gigabit Ethernet (RJ-45 connector);
	■Kensington lock slot; Input: Magic Keyboard
	■Magic Mouse 2
	■Configurable with Magic Keyboard with Numeric Keypad
	■Configurable with Magic Trackpad 2; Wireless: Wi-Fi
	■802.11ac Wi-Fi wireless networking
	■IEEE 802.11a/b/g/n compatible
	■Bluetooth; Bluetooth 4.2 wireless technology
	■Electrical and Operating Requirements: Line voltage: 100V to 240V AC
	■Frequency: 50Hz to 60Hz, single phase
	■Operating temperature: 10° to 35° C
	■Relative humidity: 5% to 90% noncondensing
	■Operating altitude: tested up to 5,000 meters
70	Desktop Computer
10	■IntelCorei5-at least 10th generation Processor 1.0 GHz
	■6M Cache, up to 3.60 GHz or higher
	Solution Cache, up to 3.00 GHz of higher Solution Cache, up to 3.00 GHz of higher Solution Cache, up to 3.00 GHz of higher
	Memory: at least 8GB Onboard memory
	Monitor: at least 21" LED-backlit FHD (1920x1080)
	■ATX Casing with Power Suply
	■USB Optical mouse and keyboard
	■Storage: 512GB SSD + 1TB HDD
	■600VA UPS, at most 4 hours charging time
71	LAPTOP
	Display Retina Display
	- 13.3 inch (diagonal) LED-backlit display with IPS Technology: 2560 by 1600 native resolution at 227 pixels per inch with support for million of colors
	- Supported scaled resolutions:
	1680 by 1050
	1440 by 900
	1024 by 640
	- 400 nits brightness
	- Wide color (P3)
	- True tone technology
	M1 chip
	- 8 core CPU with 4 performance cores and 4 efficiency
	CORES 9 core CDII
	- 8 core GPU
	- 16 core Neural Engine
	Battery and Power
	- Up to 15 hours wireless web
	- Up to 18 hours Apple TV app movie playback
	- Built in 49.9 watt hour lithium polymer battery
	- 30W USB-C Power Adapter
	Charging and Expansion Two Thunderbolt/ USB 4 ports
	with support for:
	- Charging
	- Display Port
	, ,
	- Thunderbolt 3 (up to 49Gb/s)
	, ,

	Memory 512GB
	- 512GB unified memory
	Configurable to
	- 1TB or 2TB
	Keyboard and Trackpad Backlit Magic Keyboard with:
	- 78 (US) or 79 (ISO) keys including 12 function keys
	and 4 arrows keys in an inverted T arrangement
	- Ambient light sensor
	- Force Touch trackpad for precise cursor control and
	pressure sensing capabilities: enables Force clicks,
	accelerators, pressure sensitive drawing and Multi-Touch gestures
	Touch ID
	- Touch ID Sensor
	Wireless WiFi
	- 802.11 ax Wi-Fi 6 wireless networking
	- IEEE 802.11 a/b/g/n/ac compatible
	Bluetooth
	- Bluetooth 5.0 wireless technology
	Camera
	- 720p Face Time HD camera Video Support – Simultaneously supports full native
	resolution on the built-in display at millions of colors and
	- One external display with up to 6K resolution at 60Hz
	Thunderbolt 3 digital video output
	- Native Display Port output over USB-C
	- VGA, HDMI, DVI, and Thunderbolt 2 output supported
	using adapters
	Audio
	- Stereo speakers
	- Wide stereo sound
	- Support for Dolby Atmos playback
	Three-mic array with directional beamforming
	- 3.5 mm headphone jack
72	Programmable Logic Control (PLC) Trainer
	■Package should consist of PLC Module with PLC
	■Power Supply
	■Programming and Operating System and Cables
	■Installed with sensors
	■Control Circuits
	Drivers and Protection Circuits
	■Includes important accessories such as cords
	©cables and softwares CD
	©Can perform different experiments
	with different application related to Mechanical Engineering
	■and other related fields
	■Free training to at least (3) Faculty Members
	■With user and experiment manual and example exercices
	■With warranty and program of maintenance
	■Free installation and product should be ready to use
73	Motor and Electrical Technology Trainer/Training Set for
	Educational Teaching Equipment
	©Covers Electro Mechanics
	■Electrical Machine and Drive

	■Small and Special Electric Machine			
	■Motor Control			
	■Relay Touch Control and Electrical Control			
	■Suitable for motor and electrical technology training			
	■Instrument and meters			
	■Dedicated Power Supply			
	■Motors and Experimental components			
	■are connected by dedicated wires with removal bases			
	■easy to extend for new functions			
	■Internal and External Voltage			
	■Current Leakage Protection device to ensure			
	■the short circuit protection function of each power output			
	■All the motors are specially designed			
	with characteristics of power saving			
	■energy saving			
	■low noise and etc.			
	■Each power output is designed			
	with monitoring and short-circuit protection function			
74	Portable USB Logic Analyzer and Digital Pattern Generator			
74	with High Speed Adapter			
	■A combined logic analyzer and pattern generator instrument			
	■with features to allow to debug			
	■visualize and simulate digital signals			
	■for most embedded projects			
	■digital inputs and outputs can be connected to a circuit			
	■using simple wire probes or breadboard wires			
	■with impedance-matched probes that can be used			
	■to connect and utilize inputs and outputs			
	■for more advanced projects			
	■with logic analyzer, pattern generator			
	■digital inputs and outputs			
	power supply and protocol analyzer			
	■with high speed adapter			
	should include fly wire assembly			
	■and USB a to Micro-B scale			
	Supports scripting interface			
	■allowing to create customize			
	■solution to more complex problems			
	■data can be exported to word & other tools			
75	Air Condition, Window Type, Inverter, 2HP, Standard size			
	■at least 12,000 kj/HrEER: at least 10.5 with remote control			
76	Ceiling fan			
	■Orbit typemetal blade 16"three speed controller			
77	Duplicating Machine			
	©copy printer			
	■fully-automatic one-drum stencil system			
	■300x300 dpi, 60-90 sheets per minute,			
	■220-240 V, 50-60 Hz, includes ink black			
	master and cabinet			
78	Document Scanner w/ ADF			
	■Flatbed Colored Document Scanner			
	©Combining a flatbed scanner with the convenience of a 50-			
	page ADF			

■Quickly scan stacks of documents up to 8.5" x 14"	
■Resolution: 1200 x 1200 dpi	
79 Comb Binding ring Machine	
■for long Bond paper	
■Punch Capacity: at least 15 sheets (80gsm)	
■Bind Capacity: at least 380 sheets (80gsms)	
■at least 24 holes	
■Adjustable margin guide	
■heavy duty,	
■good quality	
80 Water Dispenser, Cabinet type	
■Floor standingHot and cold functionplastic body	
■high efficiency compressorthermally protected	
81 Electric fan	
■Stand fan 16" metal bladeAdjustable heightthree speed controller	
82 Air condition, Window type, Inverter, 2.5 HP, Standard Size	!
■at least at least 24,000 BTUEER: at least 12.0With remote	е
Control	
REBIDDING	
83 Ink cartridge Cannon Pixma 810 black	
84 Ink Cartridge Canon Pixma 811 Color	
85 Ink, Brother BTD60BK, Black	
86 Ink, Brother BT5000C Cyan	
87 Ink, Brother BT5000M Magenta	
88 Ink, Brother BT5000Y Yellow	
Toner, NPG 67, Yellow for Canon C3320 Image Runner Advance (photocopier, printer/scanner) machine	
90 Surge suppressor 6 outlets	
91 HP Laser Jet CP1025 color Imaging Drum	
92 Netbook Laptop, Intel Celeron	
■Intel® Celeron® Processor N3350, up to 2.4GHz	
■Intel HD Graphics 500 GPU	
■14.1 inch HD resolution	
■4GB RAM for Advanced Multitasking	
■128GB EMMC Storage Capacity	
■38000mWh Large Battery	
Mini-HDMI Output & Two standard USB 3.0 Slot	
93 Computer Printer Continous, USB Port, w/ free lnk	
■Max. Print Resolution: 720x720 dpi (w/ Variable-Sized	
Droplet Technology)	
■Paper Size: Letter, A4, Legal	
■Print Speed: 8.5cpm (black), 4 5cpm (colored)	
Double-Sided Printing: Manual	
■USB: USB 2.0	
■Operating System Compatability Edition: Window XP/XP	
Professional x64/	
■Vista/7/8/8.1, Mac OS x 10.5.8, 10.6x, 10.7.x, 10.9.x	
■Number of Paper Trays: 1	
I ➡Ci=o: 10 1" ∨ 0 5" ∨ 5 1"	
■Size: 18.1" x 8.5" x 5.1"	
Weight: 2.4kgs with Free Continue Inks	

Section VIII. Checklist of Technical and Financial Documents

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);
 or
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document,

and

② (c) Mayor's or Business permit issued by the city or municipality where the
principal place of business of the prospective bidder is located, or the
equivalent document for Exclusive Economic Zones or Areas;

<u>and</u>

(d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Note: If the bidder submits item (a), bidder may not submit requirements (b), (c) & (d).

Technical Documents

- (f) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid in the amount of <u>at least 50% of the ABC</u> or at least One Million Eight Hundred Twenty-Eight Thousand Five Hundred Sixty-Four and 50/100 Pesos (PhP 1,828,564.50);

Statement of at least two (2) similar completed contracts, the aggregate amount of which should be equivalent to at least 50% of the ABC or at least One Million Eight Hundred Twenty-Eight Thousand Five Hundred Sixty-Four and 50/100 Pesos (PhP 1,828,564.50) and the largest of these similar contracts must be equivalent to at least half of the said aggregate amount or at least Nine Hundred Fourteen Thousand Two Hundred Eighty-Two and 25/100 Pesos (PhP 914,282.25); and

Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;

Original copy of Notarized Bid Securing Declaration; and

- (i) Conformity with the Technical Specifications; and
- [9] (j) Production/delivery schedule; and
- (k) Manpower requirements; and
- (l) After-sales/parts, if applicable; and
- (m) Original duly signed Omnibus Sworn Statement (OSS);

and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

- (n) The Supplier's audited financial statements, showing, among others, the Supplier's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; and
- ② (o) The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) at least equal to ABC (PhP 3,657,129.00); or

A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation (at least 10% of ABC or PhP 365,712.90).

II. FINANCIAL COMPONENT ENVELOPE

- (a) Original of duly signed and accomplished Financial Bid Form; and
- (b) Original of duly signed and accomplished Price Schedule(s).

Guidelines on the Preparation of Electronic Bid (e-Bid) (for bidders who prefer electronic bid submission)

- 1. Scan all documents and save as Portable Document Format (PDF) files.
- 2. Properly label each document 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	PhilGEPS		
	(Platinum)			
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	Statement of On-Going		
	& Private Contracts	Contracts		
6.	Statement of Bidder's Single Largest	SLCC		
	Completed Contract			
7.	Statement of at least two (2) similar	Statement of Completed		
	completed contracts	Contracts		
8.	Bid Security	Bid Security		
9.	Technical Specifications	Technical Specifications		
10.	SCHEDULE of	Schedule of Requirements		
	Requirements/Production and			
	delivery schedule			
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 jessamine.ecleo@vsu.edu.ph before the deadline (May 17, 2021; 8:30 AM).



