3r. No	Item Name, Description	A/U	Qty
1.	Function Generator; Make: TTi, Model: TTi TG2511A. (or equivalent)	No	01
2.	V2 Mini Drone Professional 8k HD Camera 5G Wifi FPV Air Pressure Altitude Hold Foldable Quadcopter RC Drone Toys UAV 2025 Drone with Camera, Fpv Drone, 8k HD Camera, 5G Wifi FPV, Air Pressure Altitude Hold, Foldable Quadcopter Design, 30-Minute Flight Time (or equivalent)	No	01
3.	XIAOMI Original V168 GPS Drone Professional 8K HD Aerial Photography Dual-Camera Omnidirectional Obstacle Avoidance Frequency: 5G, Channel: 4CH, Quadcopter battery: 7.4V 2000mAh LiPo (included), Single battery life: 22-25minutes, Charging time: 90 minutes, Remote control distance:5000M, Camera options: 8K HD Video Recording, 5G WiFi 4K HD/5G WIFI 6K/5G WIFI 8K, Angle: Remote control camera adjustable 90°, Up/down, forward/backward, left/right, lateral flight, 3 flight speed levels, LED lights, follow, surround flight, waypoint flight, altitude hold mode, headless mode, one button return, one button take off/landing, WiFi FPV, camera/video, Accessories Included: 1 x Aircraft, 1 x Remote transmitter, 1 x Body battery, 1 x Spare blade, 1 x USB cable 1 x Screwdriver, 1 x Built in high-definition camera, 1 x Instructions, 2 x WIFI instruction manual (or equivalent)	No	02
4.	Drawing Display: Product Name: Artist 12 Drawing Display (2nd Gen), Model: CD120FH, Dimensions: 346.20 x 209.0 x 12 mm: Work Area263.23 x 148.07 mm, Shortcut Keys:8, Display Resolution: 1920 x 1080, Stylus: X3 Elite, Pressure Levels: 8192, Tilt: 60°, Resolution: 5080 LPI, Ports Included: 2 x USB-C, Power Input: DC 5V=2A, Compatibility: Windows 7 (or later), Mac OS X 10.10 (or later), Chrome OS 88 (or later), Android (USB3.1 DP1.2), Linux, Included Accessories: 1 x Drawing Display,1 x X3 Elite Stylus, 1 x 3-in-1 USB Cable, 1 x Extension Cord, 10 x Pen Nibs, 1 x Nib Extractor, 1 x Cleaning Cloth, 1 x Black Drawing Glove, 1 x Quick Guide, 1 x Warranty Card (or equivalent)		01

5.	RUBIK Pi 3 Platform: Qualcomm Dragonwing™ QCS6490, Memory: RAM 8 GB LPDDR4x, ROM 128 GB UFS 2.2, Video: 1 x HDMI 1.4 output (up to 4K 30 Hz),1 x DP over USB Type-C (up to 4K 60 Hz), 2 x camera connector (4-lane MIPI CSI D-PHY), Wireless Connection: Wi-Fi: IEEE 802.11 a/b/g/n/ac Bluetooth: BT 5.2, On-board PCB antenna, OS Support: Android 13 Qualcomm® Linux®, Debian 13, Canonical Ubuntu for Qualcom m platforms (or equivalent)	No	01
6.	Concept ESD Workstation Kit Make: Treston Concept Workbench frame Order Code: 10049017P, Qty: 1 ESD bench top Order Code: TT15060-ESD, Qty: 1 Upright Module 2xM30 Order Code: UTM2X750M-49, Qty: 1 Light/balancer rail Order Code: 91849006P, Qty: 1 Steel shelf Order Code: 836028-49, Qty: 2 Cable duct M30 Order Code: 860 044-49, Qty: 1 Bin rail M30 Order Code: 859151-49, Qty: 2 Stacking bin Order Code: ESD 1015-4 ESD, Qty: 14 Perforated back panel Order Code: 861511-49, Qty: 1 Drawer unit 30/22 Order Code: 859340-49, Qty: 1 Power rail: Order Code: 14-91118931, Qty: 1 Treston NaturLite Led 1200 Order Code: TNL1200, Qty: 1 ESD bench top mat Order Code: PM157, Qty: 1 square meter ESD Ergo floor mat Order Code: 852880-00, Qty: 1 Adjustable wrist strap ESD Order Code: R2216, Qty: 1 Earthing cable ESD Order Code: MK3040, Qty: 1 (or equivalent)	No	03
7.	GSR Sensor: Product: Shimmer3 GSR+ Unit Specs: Meașures Galvanic Skin Response (GSR) Sampling Rate: Up to 2048Hz Wireless Connectivity: Bluetooth Battery Life: Up to 24 hours (or equivalent)	No	01
8.	G40 Low Frequency Acoustic Emission Sensor with connector type M5 (or equivalent)	No	01
9.	Multifunctional Ultrasonic Distance Sensor Specs: Model: EM400-MUD (LoRAWAN version) Frequency: AS923-1 Sensitivity: -137dBm @300bps Mode: OTAA Application Mode: TCP/UDP/MQTT/AWS Detection Range: 3 ~ 450 cm	No	30

	Detection Accuracy: ± (1+0.3%*S) cm, S=distance (-15°C ~ 60°C) Detection Resolution: 1 mm Beam Angle: 60° LED: 1 × LED Indicator (Internal) Button: 1 × Power/Reset Button (Internal) Power On & Off: NFC, Power Button (Internal) Configuration: Mobile App (via NFC), Downlink Power Supply: 2 x 9000 mAh ER26500 Li-SOCl2 Batteries Battery Life: LoRaWAN® Version: Standard mode:> 10 years (10 min interval, 25°C), Bin mode:> 10 years (20 min interval, 25°C), Parking lot mode:5 years (12 triggers per day, 25°C) Ingress Protection: IP67 Housing & Color: ABS + PC (UL94 V0), Black gray Weight: 181.4g (Batteries included) Installation: On the Flat Surfaces with Screws (or equivalent)		
10.	UG65 Indoor LoRaWAN Cateway Specs: Hardware System CPU: Quad-core 1.5 GHz, 64-bit ARM Cortex-A53 Memory: 512 MB DDR4 RAM Flash: 8 GB eMMC LoRaWAN Antenna: 2 × Internal Antennas + 1 × 50 Ω N-Female External Connector Channel: 8 (Half/Full-duplex) Frequency: A5923-1 Sensitivity: -140dBm Sensitivity @292bps Output Power: 27dBm Max Protocol: V1.0 Class A/Class B/Class C and V1.0.2 Class A/Class B/Class C Ethernet Interface Port: 1 × RJ45 (PoE PD supported) Physical Layer: 10/100/1000 Base-T (IEEE 802.3) Data Rate: 10/100/1000 Mbps (Auto-Sensing) Interface: Auto MDI/MDIX Mode: Full or Half Duplex (Auto-Sensing) • Wi-Fi Interface Antenna: Internal Antenna Standards: IEEE 802.11 b/g/n, 2.4GHz Mode: AP or Client mode Security: WPA/WPA2 authentication, WEP/TKIP/AES encryption Tx Power: 802.11b: 18 dBm +/-2.0 dBm (6 Mbps) 802.11g: 15 dBm +/-2.0 dBm (6 Mbps) 802.11g: 15 dBm +/-2.0 dBm (64 Mbps) 802.11n@2.4 GHz: 14 dBm +/-2.0 dBm (MCS0_HT20) 802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS0_HT20) 802.11n@2.4 GHz: 13 dBm +/-2.0 dBm (MCS0_HT40)	No	01

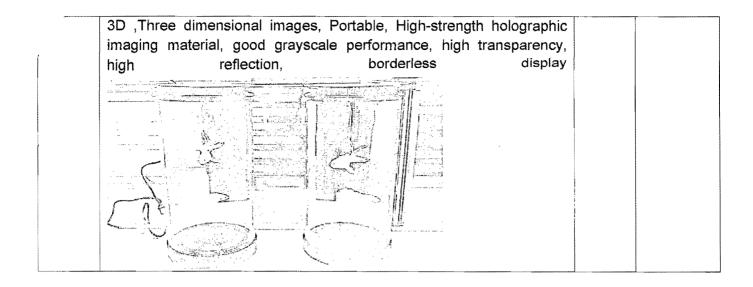
	LED Indicators: 1 × POWER, 1 × STATUS, 1 × LoRa, 1 × Wi-Fi, 1 × LTE, 1 × ETH Built-in Watchdog, RTC, Timer • Software Network Protocols: PPPoE, SNMP v1/v2c/v3, TCP, UDP, DHCP, DDNS, HTTP, HTTPS, DNS, Telnet, SSH, MQTT, MQTTS, BACnet/IP, Modbus TCP, Modbus RTU over TCP, etc. VPN Tunnel: OpenVPN/IPsec/PPTP/L2TP/GRE/DMVPN/WireGuard Firewall: ACL/DMZ/Port Mapping/MAC Binding/URL Filter Management: Web, CLI, SMS, On-demand dial up, DeviceHub, Milesight IoT Cloud, Yeastar Workplace Platform App: Python SDK, Node-RED • Power Supply and Consumption Power Input: DC Jack Connector for 9-24 VDC power supply, 1 × 802.3 af PoE input Power Consumption: Typical 2.9 W, Max 4.2 W • Physical Characteristics Ingress Protection: IP65 Dimensions: 180 x 110 x 56.5 mm (7.09 x 4.33 x 2.22 in) Installation: Desktop, Wall or Pole Mounting		
11.	Inductive Proximity Sensor Product Number: XS612B1PAL2 Range of Product: Telemecanique Inductive proximity sensors XS Sensor name: XS6 output signal Discrete Wiring Technique 3-wire [Sn] nominal sensing distance 0.16 in (4 mm) Discrete output function 1 NO Output circuit type DC Discrete output type PNP Cable length: 6.56 ft(2 m) Supply voltage: 1248 V DC reverse polarity protection (or equivalent)	No	01
12.	Photoelectric Sensor Product Number: XUK2ARCNL2R Cable length: 6.56 ft (2 m) Type of output signal Discrete Supply circuit type AC/DC Wiring Technique 5-wire Discrete output function 1 NC + 1 NO Supply voltage: 24240 V AC/DC	No	01
13.	 Pressure sensor Product Number: XMLA010B2S11 Range of Product: Telemecanique Pressure sensors XM Sensor type: Electromechanical pressure sensor Pressure Rating: 145.04 psi (10 bar) Fluid connection type G 1/4 (female) ISO 228 (or equivalent) 	No	01

$\overline{14.}$	FT-F2 Weather sensor	T	
14.	Package includes:		
	1x Ultrasonic wind speed and		
	direction sensor with installation		
	tube, 1x Data cable 4 meters, 1x		
	user manual		
	Model: FT-F2		
	Brand: fengtu		
	Wind speed: Range: 0-60m/s		
	Range: 0-60m/sAccuracy: ±3%		
	Resolution: 0.1m/s		
	Wind direction:		
	Range: 0-359°		
	Accuracy: ±3°	ļ	
	Resolution: 1°		
	Temperature:		
	■ Range: -40-+80°C		
	■ Accuracy: ±1°C	No	01
	■ Resolution: 0.1°C		
	Humidity:		
	■ Range: 0-100%		
	Accuracy: ±5%		į
	Resolution: 1		
	Air pressure:		
	 Range: 300-1100hpa 		
	Accuracy: ±1		
	Resolution: 0.1hpa		
	Weight/ diameter/ height: 56g/ 50mm/ 50mm		
	Digital output : RS485		
	Baud rate: 4800-19200		
	Communication protocol: ModBus, ASCII		
	Operating temperature/humidity: -40°C-+70°C; 0-100%		
	Working Altitude: 0-4000 meters		
	VDC: 5-24V; 28mA	:	
	Installation method: Top column installation or bottom lifting of aircraft		
	Material/Color: ABS/Black		
	(or equivalent)		
15.	Hikvision DS-3E0318P-E/M		
	16 port Fast Ethernet Unmanaged POE Switch, 16 x 10/100 Mbps		
	PoE ports, 1 x 10/100/1000 Mbps uplink ethernet port and 1 x		
	10/100/1000 Mbps uplink SFP port, IEEE 802.3 af & at high POE	No	01
	power supply, Maximum 250 m long distance PoE transmission, VIP		
	port transmission priority		
	(or equivalent)		
16.	HP Color LaserJet Pro MFP 3301fdw Wireless Printer		
10.	Print, copy, scan, fax, 2-sided prints, mobile/wireless/Ethernet Fast	No	01
	color printing at up to 26 pages per minute, HP's most reliable wi-fi	IAO	01
	and HP Wolf Pro Security, Dynamic security enabled printer		
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	(or equivalent)		
17.	FT602 Wind Sensor Wind Speed: Range 0 - 75m/s Resolution 0.1m/s Accuracy ±0.5m/s (0-5m/s) ±10% (5m/s - 75m/s) Wind Direction: Range 0 to 360° Sensor Accuracy 5° Compass Accuracy TBC Resolution 1° Temperature: Range -20 to +60°C Resolution 0.1° Accuracy TBC Pressure: Range 260 - 1260hPa Resolution 0.0001hPa Accuracy ±0.5% Tilt: Range -40 to +40° Resolution 0.1° Accuracy TBC Environment: Temperature Range -20 to +60°C (operating and storage) Humidity 0 - 100% Altitude 0 - 4000m Data I/O: Interface RS422 (full-duplex), RS485 (half-duplex) or UART Format ASCII, polled or Continuous Update modes Data Update Rate Up to 10 measurements per second (10Hz) Power Requirements: Supply Voltage 24VDC nominal (5-26VDC range) Sensor Current (Heater off) 25mA nominal (29mA with compass enabled) Physical: Weight 170g Material Polycarbonate blend polymer I/O Connector 12-way M12 connector Mounting Method Surface-mount with adaptor for pipe mounting	No	01
18.	Thermal Printer		
	VEVOR Portable Bluetooth Inkless Mobile Thermal Printer for A4 A5 11-2600mAh Battery Compatible with Mutiple Systems Home Office, Brand Name: VEVOR, Model: Y8 pro, Printing Size: 2-8.5 in, Resolution: 300 DPI, Paper Loading Method: Roll Paper + Folded Paper, Connection: Bluetooth + USB, System Compatibility: Android, i0S, Laptops, Battery: 2600mAh, Included Accessories: Thermal Paper	No	01

10	USB Stick (or equivalent)		
19.	Wifi / Bluetooth Projector Brand Name: pericat Display resolution: 1920 x 1080; Special Features: Built-In Speaker, Portable, Built-In Wi-Fi, Connectivity Technology: Bluetooth, Wi-Fi, USB, HDMI, 3.5mm Jack, Mounting Type: Ceiling/Tabletop/Tripod/Wall Mount, Included in the Box: PJ108 projector X 1, HDMI cable X 1, Remote control X 1, Instruction manual X 1, Power cable X 1,AV cable X1 (or equivalent)	No	01
20.	iMet-XQ2 UAV Sensor Rechargeable Battery Battery life: 300 Minutes Data Storage: 16 Mb Flash Memory (15 hour storage) Data Transfer: USB Sampling Rate: 1 Hz Size / Weight: 126 x 58 mm, 60 g Humidity Sensor Type: Capacitive Range: 0 - 100% RH Temperature Sensor Type: Bead Thermistor Range: - 90 to + 50 ° C Pressure Sensor Type: Piezoresistive Range: 10 - 1200 hPa GPS Type: UBlox CAM-M8 Vertical Accuracy: 12 m	No	01
21.	Epson Projector: Epson EpiqVision Flex CO-FH02 Full HD 1080p Smart Streaming Portable Projector, 3-Chip 3LCD, 3,000 Lumen Color/White Brightness, Android TV, Bluetooth, 5W Speaker, Home Entertainment (Renewed) Brand: Epson, Style: CO-FH02 (Renewed), Built-In Speaker, Portable, Connectivity: Bluetooth, Wi-Fi, USB, HDMI, Display resolution: 1920 x 1080, Smart Streaming Capability — Android TV (3) interface with a simple-to-use remote—including voice search with built-in Google Assistant, Chromecast Included (5): smartphone, tablet or computer, including from popular Android and Apple devices (6), Included Accessories: EpiqVision Flex CO-FH02 projector, power cable, projector remote control, batteries, Quick Start Guide, Android TV Streaming Media Player with remote, mini-USB cable for Android TV power, HDMI cable (or equivalent)	No	01

$\overline{22.}$	Insight - 5 Channel Wireless EEG Headset		
	Package includes:		
	1 x Insight Travel Case		
	1 x Insight Headset		
	1 x Sensors Pack		
	1 x USB-C Charging Cable		
	1 x Sensors Tip		
	1 x Fluid Bottle		
	1 x Hex Key		
	1 x 5 Dry-Sensor		
	Specs:		
	5 channels: AF3, AF4, T7, T8, Pz		
	2 references: CMS/DRL references on left mastoid process		
	New three prong gummy sensor: for better hair penetration on Pz		
	Sensor material: Hydrophilic semi-dry polymer		
	Sampling rate: 128 samples per second per channel		
	Resolution: 16 bits with 1 LSB = 0.1275μV		
	Frequency response: 0.5-43Hz, digital notch filters at 50Hz and 60Hz		
	Filtering: Built in digital 5th order Sinc filter		
	Dynamic range (input referred): 8400 μV(pp)		
	Coupling mode: AC coupled	No	01
	Wireless: Bluetooth Low Energy – Improved radio connectivity,	140	0,
	updated antenna with Bluetooth 5 support.		
	Motion Sensor		
	IMU part: ICM-20948		
	Accelerometer: 3-axis +/-8g		
	Gyroscope: 3-axis +/-2000 dps (converted to 4 normalised		
	quaternions)		
	Magnetometer: 3-axis +/- 12 gauss		
	Sampling rate: 32 Hz		
	Resolution: 16 bits		
	Battery: Internal Lithium Polymer battery 480mAh		
	Battery life: Improve battery life up to 20hrs on a single charge.		
	Detection		
	Mental commands: neutral + up to 4 pretrained items per training		
	profile		
	Performance metrics: Excitement, Engagement, Relaxation, Interest,		
	Stress, Focus		
	Facial Expressions: Blink, Wink L/R, Surprise, Frown, Smile, Clench		
	Notice: Limited beta support on Ubuntu & Raspberry Pi, subject to OS		
	changes.		
23.	3d Holographic Display Hologram Projector Hologram Cylinder		
	Advertising Display Circular Transparent Screen Hologram Box		
	Fabric: Polyester, screen height: 21.5, Screen Width: 5, Resolution:	No	02
	1920 ×1080, Ratio: 16:09, feature: LED, brand name: zc, model		
	number: SH18010, Input Interface: HDMI or USB, Audio: Built-in		
	speaker 2W*2, Video Format: MP4, MPG, AVI, Feactures: Hologram		
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- a) Required brands (where applicable, minimum 3 x brands).
- b) Specify if installation, testing, commissioning and training is required for machinery/equipment.
- e) Warranty requirement (where applicable).