

Republic of the Philippines
University of the Philippines Mindanao
Mintal, Tugbok District, Davao City

Date: 17 January 2022

BID BULLETIN NO. 01

Asimov-HAWKS Project Equipment

This Bid Bulletin is issued for the following revisions:

1. Revisions in the TECHNICAL SPECIFICATIONS

Please refer to the attached Revised Technical Specifications.

2. Revisions in the Schedule of Requirements.

Please refer to the attached Revised Schedule of Requirements.

3. Revisions in the Price Schedule.

Please refer to the attached Revised Price Schedules.

Also attached is the matrix of the revisions. The rest of the bid documents remain unchanged.

For guidance of all concerned.

For:


DOMINICA DM. DACERA, Ph. D.
Vice Chair, BAC for Goods

PROF. VLADIMIR B. KOBAYASHI

Chair, Bids and Awards Committee for Goods

Received by the bidder:

Signature over printed name/date received

Item No.	Original Technical Specifications	Revised Technical Specifications							
LOT 1	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 2	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 3	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 4	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 5	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 6	Delivery period: Thirty (30) calendar days	Delivery period: Forty-five (45) calendar days							
LOT 7	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 8	AIR CONDITIONING UNITS - 0.5HP AIRCON (3 Units)	AIR CONDITIONING UNITS - 0.5HP-0.8HP AIRCON (3 Units)							
LOT 10	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 12	<p>Delivery period: Thirty (30) calendar days</p> <p>➤ 1. UAV LIDAR SENSORS AND ACCESSORIES (2 Sets)</p> <table border="1" data-bbox="302 695 1052 1008"> <tr> <td data-bbox="302 695 1052 727">• Small and compact LiDAR with 2 units each:</td> </tr> <tr> <td data-bbox="302 727 1052 760">a. 590g 16ch LiDAR Sensors</td> </tr> <tr> <td data-bbox="302 760 1052 792">b. RJ45 Connector</td> </tr> <tr> <td data-bbox="302 792 1052 824">c. Power Adapter</td> </tr> <tr> <td data-bbox="302 824 1052 857">d. Ethernet Cable</td> </tr> <tr> <td data-bbox="302 857 1052 976">e. Interface box (IFB) with ~3 m cable connecting sensor and IFB. INS/GPS antenna/Interface included: GPS18x LVC receiver pre-configured/Programmed</td> </tr> <tr> <td data-bbox="302 976 1052 1008">f. At least 1 Year Warranty</td> </tr> </table>	• Small and compact LiDAR with 2 units each:	a. 590g 16ch LiDAR Sensors	b. RJ45 Connector	c. Power Adapter	d. Ethernet Cable	e. Interface box (IFB) with ~3 m cable connecting sensor and IFB. INS/GPS antenna/Interface included: GPS18x LVC receiver pre-configured/Programmed	f. At least 1 Year Warranty	<p>Delivery period: One Hundred Fifty (150) calendar days</p> <p>➤ 1) 1 unit Small and compact LiDAR; 590g 16ch LiDAR Sensors; RJ45 Connector; Power Adapter; Ethernet Cable; Interface box (IFB) with ~3 m cable connecting sensor and IFB. INS/GPS antenna/Interface included: GPS18x LVC receiver pre-configured/Programmed; At least 1 Year Warranty; and</p> <p>➤ 2) 1 unit Small Scanning Laser Range Finder; 2D sensor; 130g excluding cables; long distance, wide range, high speed; 20m scanning distance; 60m max detection distance; Ethernet 100Base-TX Interface, 12/24VDC Power supply; 270degrees scanning range zone; 0.25degrees angular resolution; 25ms per scan - scanning time; IP65; Inclusions: Pre-cable for power and ethernet connection; At least 1 Year Warranty</p>
• Small and compact LiDAR with 2 units each:									
a. 590g 16ch LiDAR Sensors									
b. RJ45 Connector									
c. Power Adapter									
d. Ethernet Cable									
e. Interface box (IFB) with ~3 m cable connecting sensor and IFB. INS/GPS antenna/Interface included: GPS18x LVC receiver pre-configured/Programmed									
f. At least 1 Year Warranty									
LOT 13	Delivery period: Thirty (30) calendar days	Delivery period: Sixty (60) calendar days							
LOT 14	Delivery period: Thirty (30) calendar days	Delivery period: Ninety (90) calendar days							
LOT 15	Delivery period: Thirty (30) calendar days	Delivery period: Ninety (90) calendar days							
LOT 16	Delivery period: Thirty (30) calendar days	Delivery period: Ninety (90) calendar days							
LOT 17	Delivery period: Thirty (30) calendar days	Delivery period: Ninety (90) calendar days							
LOT 18	Delivery period: Thirty (30) calendar days	Delivery period: Ninety (90) calendar days							
LOT 19	Delivery period: Thirty (30) calendar days	Delivery period: Ninety (90) calendar days							
LOT 20	Delivery period: Thirty (30) calendar days ➤ In the box of 1 Set Datalink:	Delivery period: Ninety (90) calendar days ➤ In the box of 1 Set Datalink:							

	<ul style="list-style-type: none"> 1) 1 Ground Unit w/ Antenna 2) 1 UAV Module w/ Antenna 3) Cables and Charger 4) Manuals 5) At least 1 Year Warranty 	<ul style="list-style-type: none"> 1) 1 Ground Unit w/ Antenna 2) 1 UAV Module w/ Antenna, additional 1 air unit 3) Cables and Charger 4) Manuals 5) At least 1 Year Warranty
LOT 21	Delivery period: Thirty (30) calendar days	Delivery period: One Hundred Twenty (120) calendar days
	➤ ON-BOARD COMPUTERS AND DEVELOPMENT KITS	➤ ON-BOARD COMPUTERS AND DEVELOPMENT KITS
	1 256GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent	1) 1 unit 256GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent;
	1 128GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent	2) 1 unit 128GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent;
	1 100x87mm module or equivalent	3) 1 unit 100x87mm module or equivalent;
	1 32TOPS developer kit or equivalent	4) 1 unit 32TOPS developer kit or equivalent;
	2 70x45mm module or equivalent	5) 1 unit 70x45mm module or equivalent; and
1 21TOPS developer kit or equivalent	6) 1 unit 21TOPS developer kit or equivalent	
LOT 22	Delivery period: Thirty (30) calendar days	Delivery period: Forty-five (45) calendar days
LOT 23	Delivery period: Thirty (30) calendar days	Delivery period: Forty-five (45) calendar days
LOT 24	Delivery period: Thirty (30) calendar days	Delivery period: Forty-five (45) calendar days
LOT 25	Delivery period: Thirty (30) calendar days	Delivery period: Forty-five (45) calendar days
LOT 26	Delivery period: Thirty (30) calendar days	Delivery period: Forty-five (45) calendar days

Technical Specifications

Item	Specification	Statement of Compliance
	<p>General terms for all lots</p> <p>For Equipment:</p> <p>1) The equipment must come from a credible manufacturer with support through a distributor in the country; and</p> <p>2) The equipment must be brand new and unused.</p>	<p><i>[Bidders must state here either “Comply” or “Not Comply” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data, as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i></p>

Item	Specification	Statement of Compliance
LOT 1: OFFICE LAPTOP AND ACCESSORIES		ABC: Php 170,000.00
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao, Mintal, Tugbok District, Davao City		
	1. Office Laptop And Accessories (1 unit)	ABC: Php 170,000.00
	<ul style="list-style-type: none"> ● Operating System: macOS ● Chip: M1 chip with 8-core CPU, 8-core GPU and 16-core Neural Engine ● Display: 13.3" (diagonal) LED-backlit display IPS or better ● Memory: 16GB RAM or bigger ● Storage: 2TB SSD or bigger ● Secure Authentication: Touch Bar and Touch ID Sensor ● INCLUSIONS: <ul style="list-style-type: none"> a. Office Suite b. Multi-touch Rechargeable Mouse (2.16 cm H x 5.71 cm W x 11.35 cm D; 0.099 kg; long-lasting internal battery, Bluetooth and wireless connections) c. Bag d. Kensington lock e. At least 2 Years Warranty 	

LOT 2: OFFICE LAPTOP AND ACCESSORIES		ABC: Php 150,000.00
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao, Mintal, Tugbok District, Davao City		
	1. Office Laptop And Accessories (1 unit)	ABC: Php 150,000.00
	• Operating System: macOS	
	• Chip: M1 chip with 8-core CPU, 8-core GPU and 16-core Neural Engine	
	• Display: 13.3" (diagonal) LED-backlit display IPS or better	
	• Memory: 16GB RAM or bigger	
	• Storage: 2TB SSD or bigger	
	• Secure Authentication: Touch ID Sensor	
	• INCLUSIONS:	
	a. Office Suite	
	b. Multi-touch Rechargeable Mouse (2.16 cm H x 5.71 cm W x 11.35 cm D; 0.099 kg; long-lasting internal battery, Bluetooth and wireless connections)	
	c. Bag	
d. Kensington lock		
e. At least 2 Years Warranty		
LOT 3: OFFICE LAPTOP AND ACCESSORIES		ABC: Php 130,000.00
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao, Mintal, Tugbok District, Davao City		
	1. Office Laptop And Accessories (1 unit)	ABC: Php 130,000.00
	• Operating System: macOS	
	• Chip: M1 chip with 8-core CPU, 8-core GPU and 16-core Neural Engine	
	• Display: 13.3" (diagonal) LED-backlit display IPS or better	
	• Memory: 16GB RAM or bigger	
	• Storage: 1TB SSD or bigger	
	• Secure Authentication: Touch ID Sensor	
	• INCLUSIONS:	
	a. Office Suite	
	b. Multi-touch Rechargeable Mouse (2.16 cm H x 5.71 cm W x 11.35 cm D; 0.099 kg; long-lasting internal battery, Bluetooth and wireless connections)	
	c. 4TB External Hard Drive USB-C USB 3.0	
	d. Thunderbolt / USB 4 multiport adapter (HDMI, USB-C, USB-3.0, VGA, Ethernet, SD/Micro SD Card Slot)	
	e. Bag	
f. Kensington lock		
g. At least 2 Years Warranty		
LOT 4: OFFICE DESKTOP WITH OFFICE SUITE		ABC: Php 300,000.00
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		

1. OFFICE DESKTOP WITH OFFICE SUITE (3 Units) ABC: Php 300,000.00	
• Operating System: Windows 10 Pro or Windows 11	
• Processor: AMD Ryzen 7 or better, or Intel Core i5 or better	
• Graphics: NVIDIA/AMD GPU with 6GB RAM or higher	
• Display: 24-27" IPS LED Monitor or bigger; at least 1080P resolution	
• Memory: 16GB RAM or bigger	
• Storage: 512G SSD + 2TB HDD or bigger	
• INCLUSIONS:	
a. USB noiseless optical 2-button mouse w/ mousepad	
b. USB Keyboard,	
c. Office Suite	
d. Uninterruptible Power Supply (UPS) with at least 30 minutes runtime capacity	
e. At least 2 Years Warranty	
LOT 5: LAPTOP WITH GPU AND ACCESSORIES ABC: Php 400,000.00	
Delivery period: Sixty (60) calendar days	
Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
1. LAPTOP WITH GPU AND ACCESSORIES (2 Units) ABC: Php 400,000.00	
• Operating System: Windows 10 Pro 64 bit	
• Processor: Intel Core i7 or equivalent	
• Graphics: RTX3080 Ti 12GB GDDR6X or equivalent	
• Display: 15.60" 1920 x 1080 120Hz or equivalent/better	
• Memory: 32G RAM or bigger	
• Storage: 2TB SSD + 1TB HDD or bigger	
• INCLUSIONS:	
a. Bag	
b. Kensington Lock	
c. Wireless noiseless optical 2-button mouse w/ mousepad,	
d. At least 2 Years Warranty	
LOT 6: LASER COLORED PRINTER ABC: Php 127,000.00	
Delivery period: Forty-five (45) calendar days	
Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
1. LASER COLORED PRINTER (1 Set) ABC: Php 127,000.00	
• Functions: Printer, Copier, Scanner	
• Copier Type: Digital	
• Max Original Size: A3/Ledger (11.7 in x 17 in)	
• Printing Technology - Output: Laser – Colored	
• Office Machine Features: Save to USB flash drive, scan to e-mail, scan to folder, scan to network	
• Display Features: Touch Screen	
• Max Printing Resolution: Up to 600 x 600 dpi (mono) / up to 600 x 600 dpi (color)	
• Document Feeder: ADF	

	<ul style="list-style-type: none"> ● INCLUSIONS: a. Set of Consumable Cartridges (C,M,Y,K) b. At least 1 Year Warranty for accessories; Spare parts replacement free of charge for 1 Year; Repair service is free for two years 	
LOT 7: WORKSTATION WITH GPU AND ACCESSORIES ABC: Php 1,375,000.00		
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	1. WORKSTATION WITH GPU AND ACCESSORIES (5 Units) ABC: Php 1,375,000.00	
	<ul style="list-style-type: none"> ● Operating System: Windows 10 Pro 64 bit ● Processor: Intel Core i9 or better, or Intel Xeon or equivalent ● Graphics: 2x NVIDIA RTX2080 8GD6 or equivalent ● Display: 24-27" double screen configuration or bigger, tilt pivot swivel height adjustable or better, LED edge light, IPS FHD 1920 x 1080 120Hz or bigger ● Memory: 64G RAM or bigger ● Storage: 2TB SSD + 4TB HDD or bigger ● Connectivity: Ethernet and Wi-Fi ● Power Supply: 1200 Watts or bigger ● INCLUSIONS: a. UPS (30mins-1hour runtime) at least 80 Plus Gold b. USB noiseless optical 2-button mouse w/ mousepad c. USB Keyboard, d. At least 2 Years Warranty 	
LOT 8: AIR CONDITIONING UNITS ABC: Php 330,000.00		
Delivery period: Thirty (30) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	1. AIR CONDITIONING UNITS - 0.5HP-0.8HP AIRCON (3 Units)	
	<ul style="list-style-type: none"> ● Inverter ● Split-type ● INCLUSIONS: a. Remote control b. Bracket c. Installation Supplies & Materials d. Labor Fee e. Delivery Fee f. At least 1 Year Warranty 	
	2. AIR CONDITIONING UNITS - 1.5HP AIRCON (2 Units)	
	<ul style="list-style-type: none"> ● Inverter ● Split-type ● INCLUSIONS: a. Remote control b. Bracket c. Installation Supplies & Materials 	

	d. Labor Fee	
	e. Delivery Fee	
	f. At least 1 Year Warranty	
	3. AIR CONDITIONING UNITS - 2.5HP AIRCON (3 Units)	
	• Inverter	
	• Split-type	
	• INCLUSIONS:	
	a. Remote control	
	b. Bracket	
	c. Installation Supplies & Materials	
	d. Labor Fee	
	e. Delivery Fee	
	f. At least 1 Year Warranty	
LOT 9: BIOMETRIC LOCK ASSEMBLY ABC: Php 27,500.00		
Delivery period: Thirty (30) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	1. BIOMETRIC LOCK ASSEMBLY (1 Set) ABC: Php 27,500.00	
	• Multi-purpose System: Card Access, Fingerprint, PIN; Infrared Detection Sensor	
	• Single Door Magnetic Locks; Push Button Exit Switch	
	• Access Control Power Supply with Battery; Buzzer and multi-color LED	
	• IP65 rated rugged waterproof and dustproof structure	
	• INCLUSIONS:	
	a. 10 dual purpose Integrated Circuit (IC) Cards and company ID (front & back design)	
	b. Cabling Materials	
	c. Installation Fee	
	d. At least 1 Year Warranty	
LOT 10: QR-BASED INVENTORY SYSTEM ABC: Php 28,660.00		
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	1. QR-BASED INVENTORY SYSTEM (1 Set) ABC: Php 28,660.00	
	• Wireless	
	• Handheld	
	• Supports 1D/2D Wireless Barcode Scanner with memory card (auto charging)	
	• INCLUSIONS:	
	a. QR code generator, scanner, and software	
	b. Compact Barcode Printer (Label Satin - Ribbon included)	
	c. Free Training	
	d. At least 1 Year Warranty	
LOT 11: CCTV KIT ABC: Php 93,840.00		
Delivery period: Thirty (30) calendar days		

Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
1. CCTV KIT (1 Set)	ABC: Php 93,840.00
<ul style="list-style-type: none"> • Internet Protocol (IP) Cameras • Up to 30 fps • 3-axis adjustment for flexible mounting on a wall or ceiling • Integrated IR-cut filter & IR LEDs • IP 66-67 • High Dynamic Range technology • 3D noise reduction • Configurable video motion detection alarms • INCLUSIONS: <ul style="list-style-type: none"> a. Ten (10) Units of Vandal Dome Indoor Cameras - 1/2.8" progressive scan CMOS; 1920 x 1080@30fps; 2.8 mm/4 mm fixed lens; H.265+/H.265/H.264+/H.264; Dual stream; Digital WDR (Wide Dynamic Range); 3D DNR (Digital Noise Reduction); Up to 30 m IR range; PoE (Power over Ethernet); IP67; IK10 b. Four (4) Units of Bullet Outdoor Cameras - 1/2.8" progressive scan CMOS; 1920 x 1080@30fps; 2.8 mm/4 mm fixed lens; H.265+/H.265/H.264+/H.264; Dual stream; Digital WDR (Wide Dynamic Range); 3D DNR (Digital Noise Reduction); Up to 30 m IR range; PoE (Power over Ethernet); IP67 c. One (1) Unit of Pan-Tilt-Zoom Outdoor Camera - 1/2.7" 2Megapixel CMOS; Powerful 4x optical zoom; Support Triple-streams encoding; WDR, Day/Night(ICR); Ultra DNR; Max. 25/30fps@1080P, 25/30/50/60fps@720P; IVS; Support PoE; IR distance up to 30m d. One (1) Unit of Network Video Recorder (NVR) - Embedded 4K NVR; Third-party network cameras supported; Up to 8MP resolution recording; Support 1-ch HDMI, 1-ch VGA, HMDI at up to 4K(3840x2160) resolution; 16-ch network cameras can be connected with 160M/256M incoming bandwidth; Up to 4 SATA interfaces; Support dual-os to ensure high reliability of system running; Support various VCA detection alarm and VCA search; Support H.265/H.264/ MPEG4 video formats e. One (1) Unit of POE Switch 16 port f. RJ 45 Connectors, UTP Cable CAT 5E, Cables, and Related Wiring/Conduit Materials, Assemblies, and Equipment g. Delivery and Installation of CCTV Kit h. At least 1 Year Warranty 	
LOT 12: UAV LIDAR SENSORS AND ACCESSORIES	
ABC: Php 610,000.00	
Delivery period: One Hundred Fifty (150) calendar days	
Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
1. UAV LIDAR SENSORS AND ACCESSORIES (2 Sets)	ABC: Php 610,000.00
<ul style="list-style-type: none"> • 1) 1 unit Small and compact LiDAR; 590g 16ch LiDAR Sensors; RJ45 Connector; Power Adapter; Ethernet Cable; Interface box (IFB) with ~3 m cable connecting sensor and IFB. INS/GPS antenna/Interface included: GPS18x LVC 	

	receiver pre-configured/Programmed; At least 1 Year Warranty; and <ul style="list-style-type: none"> 2) 1 unit Small Scanning Laser Range Finder; 2D sensor; 130g excluding cables; long distance, wide range, high speed; 20m scanning distance; 60m max detection distance; Ethernet 100Base-TX Interface, 12/24VDC Power supply; 270degrees scanning range zone; 0.25degrees angular resolution; 25ms per scan - scanning time; IP65; Inclusions: Pre-cable for power and ethernet connection; At least 1 Year Warranty 	
LOT 13: MULTISPECTRAL/HYPERSPECTRAL CAMERA(S) AND ACCESSORIES ABC: Php 450,000.00 Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	1. MULTISPECTRAL/HYPERSPECTRAL CAMERA(S) AND ACCESSORIES (2 Sets) ABC: Php 450,000.00 <ul style="list-style-type: none"> 2 Units of Multispectral sensor camera, each with: <ul style="list-style-type: none"> a. 1 year license Pix4Dfields software b. 16MP RGB Camera and Four cameras for capturing images of four bands: green, red, red edge and near infrared c. 72g d. 64GB internal memory capacity e. WiFi and USB access f. Sunshine sensor for automatic adjustment of readings to ambient light g. GPS, IMU and Magnetometer h. Slot for optional SD card to add memory and ease data transfer i. At least 1 Year Warranty 	
LOT 14: 3D PRINTER ABC: Php 145,000.00 Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	1. 3D PRINTER (2 Sets) ABC: Php 145,000.00 <ul style="list-style-type: none"> 2 units of Original Assembled 3D printer each with: <ul style="list-style-type: none"> a. Build volume (25 x 21 x 21 cm 9.84 x 8.3 x 8.3 in) b. Layer height (0.05 – 0.35 mm) c. Max travel speed (200+ mm/s) d. Max hotend/heatbed temp.(300 °C / 120 °C (572 °F / 248 °F) e. Mainboard (Einsy RAMBo 8-bit board with Trinamic 2130 drivers co-developed with Ultimachine) f. Has IR Filament sensor INCLUSION: <ul style="list-style-type: none"> a. Free 1kg filament spool of Silver PLA b. At least 1 Year Warranty 	
LOT 15: COMPUTING STATION WITH GPU AND HIGH-CAPACITY STORAGE AND ACCESSORIES ABC: Php 1,000,000.00 Delivery period: Ninety (90) calendar days		

Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
1. COMPUTING STATION WITH GPU AND HIGH-CAPACITY STORAGE AND ACCESSORIES (1 SET) ABC: Php 1,000,000.00	
<ul style="list-style-type: none"> • OS: Win10Pro64 bit/Ubuntu 20.04.3 LTS • CPU: AMD Ryzen Threadripper 3960X 24-Core TRX40 or similar w/ CPU Cooler • Motherboard: Gigabyte TR40X Aorus Master or similar • RAM: Corsair Vengeance LPX 8x16gb or similar • GPU: 2 x RTX 3090 24gb with NVLink or similar • CASE: Thermaltake Core p8 or similar • PSU: Seasonic PRIME 1300 watts 80+ platinum or similar • SSD: 980 PCIe 3.0 NVMe M.2 2280 1TB or similar • SSD: 3 x 2TB SSD 2.5" SATA 3 or similar • NAS Synology 8-bay DS1821+ or similar • HDD: 8 x Exos X16 16TB Enterprise or similar • APC UPS for superworkstation; 1440VA • APC UPS for NAS; 500VA • Monitor: dual (27" x 2 + dual monitor stand) or curved (49" CRG9 dual QHD HDR1000 and QLED AMD Radeon(TM) FreeSync(TM) 2 and 120Hz refresh rate) or similar • INCLUSIONS: <ul style="list-style-type: none"> a. USB noiseless optical 2-button mouse w/ mousepad b. USB Keyboard c. At least 2 Years Warranty 	
LOT 16: UAVs AND ACCESSORIES ABC: Php 610,600.00	
Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
1. UAVs AND ACCESSORIES: 1 Set Quadcopter UAV w/ 55min Max Flight Time, 9kg Max Takeoff Weight: 1 Aircraft Body,1 Smart Controller w/ Battery, 4 Flight Batteries, 1 Battery Station, 1 Carrying Case, Cables & Charger, Propellers & Holders, Spare Parts, Screws ABC: Php 610,600.00	
<i>In the box of Quadcopter UAV w/ 55min Max Flight Time, 9kg Max Takeoff Weight:</i>	
<ul style="list-style-type: none"> • 1 Quadcopter Aircraft Body • 1 Smart Controller Enterprise • 4 TB60 Intelligent Flight Battery • 1 BS60 Intelligent Battery Station • 1 USB Charger • 1 USB-C Cable • 2 2110 Propellers (Clockwise) • 2 2110 Propellers (Counter-Clockwise) • 2 Landing Gear • 1 Pair Spare Stick Cover • 2 Pairs Propeller Holder • 4 Spare Gimbal Damper • 1 USB Cable with Double A Ports 	

<ul style="list-style-type: none"> • 1 Vision System Calibration Plate 	
<ul style="list-style-type: none"> • 1 Carrying Case 	
<ul style="list-style-type: none"> • 1 Smart Controller Lanyard 	
<ul style="list-style-type: none"> • 1 Set Rubber Port Cover 	
<ul style="list-style-type: none"> • Screws and Tools 	
<ul style="list-style-type: none"> • 1 WB37 Intelligent Battery for the Smart Controller 	
<ul style="list-style-type: none"> • 1 Power Cable 	
<ul style="list-style-type: none"> • 1 Pair Spare Control Stick 	
<ul style="list-style-type: none"> • Manuals 	
<ul style="list-style-type: none"> • At least 1 Year Warranty 	
<p>Specifications of Quadcopter UAV w/ 55min Max Flight Time, 9kg Max Takeoff Weight:</p>	
<p>1) Aircraft:</p> <ul style="list-style-type: none"> • 55 min Max Flight Time; 9 kg Max Takeoff Weight; • Weight (with single downward gimbal): Approx. 3.6 kg (w/o batteries), • Approx. 6.3 kg (w/ 2 TB60 batteries); • 2.7 kg Max payload capacity; 930g Single Gimbal Damper's Max Payload; • 15 km Transmission Range; 1080p Triple-channel Video; • FPV Camera: 960P Resolution, 145° FOV, 30fps frame rate; • Operating Frequency: 2.4000-2.4835 GHz, 5.725-5.850 GHz; • 23 m/s Max Flight Speed; 15 m/s Max Wind Resistance; • Dimensions: Unfolded, propellers excluded, 810x670x430 mm (LxWxH), • Folded, propellers included, 430x420x430 mm (LxWxH); • Operating Temperature: -20°C to 50°C; • @Vision System: • Obstacle Sensing Range: Forward/Backward/Left/Right: 0.7-40m; • Upward/Downward: 0.6-30m; • FOV: Forward/Backward/Downward: 65° (H), 50° (V); • Left/Right/Upward: 75°(H), 60°(V); • Operating Environment: Surfaces with clear patterns and adequate lighting (> 15 lux); • @Infrared ToF Sensing System: • Obstacle Sensing Range: 0.1-8m; FOV: 30° (±15°); • Operating Environment: Large, diffuse and reflective obstacles (reflectivity >10%). • @Top and bottom auxiliary light: Effective lighting distance: 5m. • @General: • Automate inspections with Live Mission Recording and AI Spot Check; • Advanced algorithms enable PinPoint and Smart Track to obtain dynamic location information for subjects in view; • 6 Directional Sensing and Positioning system enhances flight safety; • Password-protected access to aircraft and data; • AirSense ADS-B Receiver warns of nearby airplanes and helicopters; • Secure data transmission with AES-256 encryption; • App with Local Data Mode protects drone data. 	

	<p>2) <i>Smart Controller</i></p> <ul style="list-style-type: none"> • @OcuSync Enterprise: • Operation Frequency Range: 2.400-2.4835 GHz; 5.725-5.850 GHz 1; • Max Transmission Distance (Unobstructed, free of interference): NCC / FCC: 15 km; CE / MIC: 8 km; SRRC: 8 km; Transmitter Power (EIRP): 2.400-2.4835 GHz: 29.5 dBm (FCC); 18.5 dBm (CE) ; 18.5 dBm (SRRC); 18.5 dBm (MIC), 5.725-5.850 GHz: 28.5 dBm (FCC); 12.5 dBm (CE); 20.5 dBm (SRRC). • @Wi-Fi: • Protocol: Wi-Fi Direct, Wi-Fi Display, 802.11a/g/n/ac, Wi-Fi with 2x2 MIMO is supported; • Operation Frequency Range 2.400-2.4835 GHz; 5.150-5.250 GHz 1; 5.725-5.850 GHz • Transmitter Power (EIRP): 2.400-2.4835 GHz: 20.5 dBm (FCC); 18.5 dBm (CE); 18.5 dBm (SRRC); 20.5 dBm (MIC) 5.150-5.250 GHz: 14 dBm (FCC); 14 dBm (CE); 14 dBm (SRRC); 14 dBm (MIC), 5.725-5.850 GHz: 18 dBm (FCC); 12 dBm (CE); 18 dBm (SRRC). • @Bluetooth: • Protocol Bluetooth: 4.2; Operation Frequency Range: 2.400-2.4835 GHz; • Transmitter Power (EIRP): 4 dBm (FCC); 4 dBm (CE); 4 dBm (SRRC); 4 dBm (MIC) • @General: • External Battery: Name: WB37 Intelligent Battery; • Capacity: 4920 mAh; Voltage: 7.6 V; • Type: LiPo; Energy: 37.39 Wh; • Charge Time (Using BS60 Intelligent Battery Station): 70 min (15° to 45° C); 130 min (0° to 15° C) • Built-in Battery: Battery Type: 18650 Li-ion (5000 mAh @ 7.2 V); • Charge Type: Supports USB charger rated 12 V / 2 A; • Rated Power: 17 W 2; • Charge Time: 2 hours and 15 minutes (Using a USB charger rated 12 V / 2 A); • Working Time: 2 Built-in Battery: Approx. 2.5 hours; • Built-in Battery + External Battery: Approx. 4.5 hours; • Storage Capacity: ROM 32GB + RAM 4GB; • Video Output Port: HDMI Port; • Power Supply Voltage / Current (USB-A port): 5 V / 1.5 A; • Operation Temperature Range: -20° to 40° C (-4° to 104° F); • GNSS: GPS+GLONASS; • Weight: External Battery excluded: Approx. 885 g; • External Battery included: Approx. 1054 g. • Dimensions (Antennas folded): 178x164x108 mm 	
	<p>3) <i>TB60 Intelligent Flight Battery</i></p> <ul style="list-style-type: none"> • Capacity: 5935 mAh; • Voltage: 52.8 V; Battery Type: LiPo 12S; • Energy: 274 Wh; Net Weight: Approx. 1.35 kg; • Operating Temperature: -4°F to 122°F (-20°C to 50°C); • Ideal storage temperature: 71.6°F to 86°F (22°C to 30°C); • Charging Temperature: -4°F to 104°F (-20°C to 40°C); • (When the temperature is lower than 5°C, the self-heating function 	

	<p>will be automatically enabled.</p> <ul style="list-style-type: none"> • Charging in a low temperature may shorten the lifetime of the battery) • Charging time: Using BS60 Intelligent Battery Station: • 220V input: 60 minutes (fully charging two TB60 batteries), • 30 minutes (charging two TB60 batteries from 20% to 90%) • 110V input: 70 minutes (fully charging two TB60 batteries), • 40 minutes (charging two TB60 batteries from 20% to 90%). 	
	<p>4) <i>BS60 Intelligent Battery Station</i></p> <ul style="list-style-type: none"> • Dimensions: 501*403*252mm; • Net Weight: 8.37kg; • Maximum Capacity: TB60 Intelligent Flight Battery x 8; • WB37 Intelligent Battery x 4; • Input: 100-120 VAC, 50-60 Hz / 220-240 VAC, 50-60 Hz; • Max. Input Power: 1070W; • Output Power: 100-120 V: 750 W; 220-240 V: 992 W; • Operating Temperature: -4°F to 104°F (-20°C to 40°C). 	
<p>LOT 17: UAVs AND ACCESSORIES ABC: Php 89,600.00</p> <p>Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City</p>		
	<p>1. UAVs AND ACCESSORIES: 1 Set Quadcopter UAV w/ at least 30min Max Flight Time, 595g to 1, 375g Takeoff Weight: 1 Aircraft Body, 1 Remote Controller, 1-3 Flight Batteries, 1 Battery Charger, 1 Shoulder Bag or Carrying Case, 4 to 6 Pairs Propellers ABC: Php 89,600.00</p>	
	<p>• In the box: -If 595g-UAV Quadcopter w/ at least 30min Max Flight Time:</p> <ol style="list-style-type: none"> 1) 1 Quadcopter Aircraft Body 2) 1 RC-N1 Remote Controller 3) 3 Intelligent Flight Battery 4) 1 Battery Charger 5) 1 AC Power Cable 6) 6 Pair Low-Noise Propellers 7) 1 Gimbal Protector 8) 1 Type-C Cable 9) 1 RC Cable (USB Type-C Connector) 10) 1 RC Cable (Lightning Connector) 11) 1 RC Cable (Standard Micro-USB Connector) 12) 1 Pair Spare RC-N1 Control Sticks 13) 1 ND Filters Set (ND4/8/16/32) 14) 1 Battery Charging Hub 15) 1 Battery to Power Bank Adaptor 16) 1 Shoulder Bag 17) 1 Sandisk 64GB Extreme SD Card 18) Manuals 19) At least 1 Year Warranty 	
	<p>• In the box: -If 1,375g-UAV Quadcopter w/ at least 30min Max Flight Time:</p> <ol style="list-style-type: none"> 1) 1 Aircraft Body 2) 1 Remote Controller 3) 1 Intelligent Flight Battery 4) 1 Battery Charger 5) 1 Power Cable 	

	<p>6) 4 Pair Propellers 7) 1 Gimbal Clamp 8) 1 Micro-USB Cable 9) 1 Carrying Case 10) 1 Sandisk 64GB Extreme SD Card 11) Manuals 12) At least 1 Year Warranty</p>	
	<p>• Specifications of UAV Quadcopter w/ 595g to 1,375g Takeoff Weight and at least 30min Max Flight Time:</p>	
	<p>1) Aircraft (595g-UAV & 1,375g-UAV):</p> <ul style="list-style-type: none"> • at least 30min Max Flight Time; 595g to 1,375g Takeoff Weight (Battery & Propellers included); • Dimensions (595g-UAV): Folded: 180x97x77 mm (lwxhx), Unfolded: 183x253x77 mm (lwxhx); • Diagonal Length: 302 (595g-UAV) or 350 mm (1,375g-UAV); • Max Ascent & Descent Speed (595g-UAV): 6 m/s (S and N Mode); • Max Ascent Speed (1,375g-UAV): S-mode: 6 m/s, P-mode: 5 m/s; • Max Descent Speed (1,375g-UAV): S-mode: 4 m/s, P-mode: 3 m/s; • Max Service Ceiling Above Sea Level: 5000 m (595g-UAV), 6000 m (1,375g-UAV); • Max Flight Distance (no wind): 18.5 km (595g-UAV); • Max Wind Speed Resistance: 10.7 m/s (595g-UAV), 10m/s (1,375g-UAV); • Max Tilt Angle (595g-UAV): 35° (S Mode), Front: 30°, Back: 20°, Left: 35°, Right: 35° (N Mode); • Max Tilt Angle (1,375g-UAV): S-mode: 42°, A-mode: 35°, P-mode: 25°; • Max Angular Velocity (595g-UAV): 250°/s (S Mode), 90°/s (N Mode), 60°/s (C Mode); • Max Angular Speed (1,375g-UAV): S-mode: 250°/s, A-mode: 150°/s; • Hovering Accuracy Range: • Vertical (595g- & 1,375g-UAV): ± 0.1 m (with vision positioning), ± 0.5 m (with GNSS positioning); • Horizontal (595g-UAV): ± 0.1 m (with vision positioning), ± 1.5 m (with GNSS positioning); • Horizontal (1,375g-UAV): ± 0.3 m (with vision positioning), ± 1.5 m (with GNSS positioning); • Propellers (595g-UAV): Quick release, low noise, folding; Aircraft Arms (595g-UAV): Foldable; • GNSS: GPS+GLONASS+GALILEO (595g-UAV), GPS+GLONASS (1,375g-UAV); • Compass (595g-UAV): Single Compass; IMU (595g-UAV): Single IMU; • Internal Storage (595g-UAV): 8 GB. 	
	<ul style="list-style-type: none"> • @Camera (595g-UAV): • Sensor: 1" CMOS, Effective Pixels: 20 MP; 2.4µm Pixel Size; • Lens: FOV: 88°, 35 mm Format Equivalent: 22 mm, Aperture: f/2.8, Shooting Range: 0.6 m to ∞; • Still Image Size: 20 MP, 5472x3648 (3:2), 5472x3078 (16:9); • Video Resolution: 5.4K: 5472x3078 @ 24/25/30 fps, • 4K Ultra HD: 3840x2160 @ 24/25/30/48/50/60 fps, 	

	<ul style="list-style-type: none"> • 2.7K: 2688x1512 @ 24/25/30/48/50/60 fps, • FHD: 1920x1080 @ 24/25/30/48/50/60/120 fps, • MP4/MOV (H.264/MPEG-4 AVC, H.265/HEVC); • Max Video Bitrate: 150 Mbps; • Supported File System: FAT32/exFAT, Supports a microSD card with a capacity of up to 256 GB. • Digital Zoom: Zoom recording is not available while recording 10-bit videos and 120fps videos. • 4K/30fps: 4x, 2.7K/60fps: 4x, 2.7K/30fps: 6x, 1080p/60fps: 6x, 1080p/30fps: 8x. • <i>@Camera (1,375g-UAV):</i> • Sensor: 1-inch CMOS, Effective pixels: 20M; • Lens: FOV 84° 8.8 mm/24 mm (35 mm format equivalent) f/2.8-f/11 auto focus at 1 m-∞ • Image Size: 3:2 Aspect Ratio: 5472x3648, 4:3 Aspect Ratio: 4864x3648, 16:9 Aspect Ratio: 5472x3078. • Video Recording Modes: • H.265: C4K: 4096x2160 24/25/30p @100Mbps, 4K: 3840x2160 24/25/30p @100Mbps, • 2.7K:2720x1530 24/25/30p @65Mbps, 2.7K: 2720x1530 48/50/60p @80Mbps, • FHD: 1920x1080 24/25/30p @50Mbps, FHD: 1920x1080 48/50/60p @65Mbps, • FHD: 1920x1080 120p @100Mbps, HD:1280x720 24/25/30p @25Mbps, • HD: 1280x720 48/50/60p @35Mbps, HD: 1280x720 120p @60Mbps; • H.264: C4K: 4096x2160 24/25/30/48/50/60p @100Mbps, • 4K: 3840x2160 24/25/30/48/50/60p @100Mbps, 2.7K: 2720x1530 24/25/30p @80Mbps, • 2.7K: 2720x1530 48/50/60p @100Mbps, FHD: 1920x1080 24/25/30p @60Mbps, • FHD: 1920x1080 48/50/60 @80Mbps, FHD: 1920x1080 120p @100Mbps, • HD: 1280x720 24/25/30p @30Mbps, HD: 1280x720 48/50/60p @45Mbps, • HD: 1280x720 120p @80Mbps; • Max Video Bitrate: 100 Mbps; • Supported File Systems: FAT32 (≤32 GB); exFAT (>32 GB); • Supported SD Cards: microSD Max Capacity: 128 GB; • Photo: JPEG, DNG (RAW), JPEG + DNG; Video: MP4/MOV (AVC/H.264; HEVC/H.265); • <i>@Gimbal (595g-UAV):</i> • Stabilization: 3-axis (tilt, roll, pan), • Mechanical Range: Tilt: -135° to 45°, Roll: -45° to 45°, Pan: -100° to 100°, • Pan Axis: Not Controllable, • Controllable Range: Tilt: -90° to 0°(default), -90° to 24° (extended), • Max Controllable Speed (tilt): 100°/s, • Angular Vibration Range: ±0.01°. 	
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	<p>@Gimbal (1,375g-UAV):</p> <ul style="list-style-type: none"> • Stabilization: 3-axis (pitch, roll, yaw), • Controllable Range: Pitch: -90° to +30°, • Max Controllable Angular Speed: Pitch: 90°/s, • Angular Vibration Range: ±0.02°. <p>@Vision Sensing System (595g-UAV):</p> <ul style="list-style-type: none"> • Forward: Precision Measurement Range: 0.38-23.8 m, Effective Sensing Speed: ≤15 m/s, • Field of View (FOV): 72° (horizontal), 58° (vertical); • Backward: Precision Measurement Range: 0.37-23.4 m, Effective Sensing Speed: ≤12 m/s, • Field of View (FOV): 57° (horizontal), 44° (vertical); • Downward: ToF Measurement Range: 0.1-8 m, Hovering Range: 0.5-30 m, • Vision Sensor Hovering Range: 0.5-60 m; • Left/Right: N/A; • Upward: Precision Measurement Range: 0.34-28.6 m, • Field of View (FOV): 63° (horizontal), 78° (vertical); • Downward Auxiliary Light: Single LED. <p>@Vision Sensing System (1,375g-UAV):</p> <ul style="list-style-type: none"> • Forward Vision System: 60° (Horizontal), ±27° (Vertical), • Backward Vision System: 60° (Horizontal), ±27° (Vertical), • Downward Vision System: 70° (Front and Rear), 50° (Left and Right). <p>@Video Transmission (595g-UAV):</p> <ul style="list-style-type: none"> • Operating Frequency: 2.4 GHz, 5.8 GHz; • Transmission Power (EIRP): 2.4 GHz: FCC: ≤30 dBm, CE: ≤20 dBm, SRRC: ≤20 dBm, MIC: ≤20 dBm; • 5.8 GHz: FCC: ≤30 dBm, CE: ≤14 dBm, SRRC: ≤29 dBm; • Transmission System: O3, • 2.4 GHz/5.8 GHz Auto-Switching (compatible with OcuSync 2.0), 4-antenna 2T4R; • Max Transmission Distance: 12 km (FCC), 8 km (CE), 8 km (SRRC), 8 km (MIC); • Live View Quality/Latency: Drone + Remote Controller: 1080p/30fps 12 Mbps 120 ms, • UAV + Smart Controller: 1080p/30fps 12Mbps 130 ms; • Max Transmission Bitrate: 44 Mbps (download bitrate), 16 Mbps (live video bitrate); • Operating Temperature Range: 0° to 40°C (32° to 104°F). <p>@Video Transmission (1,375g-UAV):</p> <ul style="list-style-type: none"> • Operating Frequency: 2.400-2.483 GHz and 5.725-5.850 GHz; • Transmitter Power (EIRP): 2.400-2.483 GHz: FCC: 26 dBm, CE: 20 dBm, SRRC: 20 dBm, MIC: 17 dBm; • 5.725-5.850 GHz: FCC: 26 dBm, CE: 14 dBm, SRRC: 20 dBm, MIC: -; • Max Transmission Distance: (Unobstructed, free of interference) FCC: 10000 m, CE: 6000 m, SRRC: 6000 m, MIC: 6000 m; 	
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	<ul style="list-style-type: none"> • Live View Working Frequency: 2.4 GHz ISM, 5.8 GHz ISM; • Live View Quality: 720P @ 30fps, 1080P @ 30fps; • Latency: 220 ms (depending on conditions and mobile device) • Operating Temperature Range: 32° to 104°F (0° to 40°C) <p>2) <i>Remote Controller (595g-UAV):</i></p> <ul style="list-style-type: none"> • Multiple Controllers: N/A; • Smart Controller: Supported; • Remote Controller Transmission System: Ocusync3; • Battery Life: 6 hours (4 hours when charging a mobile device); • Supported Mobile Device Connectors: Lightning, Micro USB, USB-C; • Max Supported Mobile Device Size: 180x86x10 mm (lwxhxh) • Operating Temperature: 0° to 40°C (32° to 104°F); • Transmitter Power (EIRP): 2.4 GHz: FCC: ≤26 dBm, CE: ≤20 dBm, SRRC: ≤20 dBm, MIC: ≤20 dBm; • 5.8 GHz: FCC: ≤26 dBm, CE: ≤14 dBm, SRRC: ≤26 dBm. <p>2) <i>Remote Controller (1,375g-UAV):</i></p> <ul style="list-style-type: none"> • Operating Frequency: 2.400-2.483 GHz and 5.725-5.850 GHz; • Max Transmission Distance: 2.400-2.483 GHz, 5.725-5.850 GHz (Unobstructed, free of interference) • FCC: 10000 m, CE: 6000 m, SRRC: 6000 m, MIC: 6000 m; • Remote Controller Transmission System: OcuSync 2.0 HD; • Battery: 6000 mAh LiPo 2S; • Operating Current/Voltage: 1.2 A@7.4 V; • Video Output Port: GL300K: HDMI, GL300L: USB; • Mobile Device Holder: GL300K: Built-in display device (5.5-inch screen, 1920x1080, 1000 cd/m², Android system, 4 GB RAM + 16 GB ROM), GL300L: Tablets and smart phones; • Operating Temperature Range: 32° to 104°F (0° to 40°C); • Transmitter Power (EIRP): 2.400-2.483 GHz: FCC: 26 dBm, CE: 20 dBm, SRRC: 20 dBm, MIC: 17 dBm; • 5.725-5.850 GHz: FCC: 26 dBm, CE: 14 dBm, SRRC: 20 dBm, MIC: -. <p>3) <i>Intelligent Flight Battery (595g-UAV):</i></p> <ul style="list-style-type: none"> • Capacity: 3500 mAh; Voltage: 11.55 V; Battery Type: LiPo 3S; • Max Charging Voltage: 13.2 V; • Energy: 40.42 Wh; Weight: 198 g; • Charging Temperature Range: 5° to 40°C (41° to 104°F); • Max Charging Power: 38 W; • Built-in Battery: N/A. <p>3) <i>Intelligent Flight Battery (1,375g-UAV):</i></p> <ul style="list-style-type: none"> • Capacity: 5870 mAh; Voltage: 15.2 V; Battery Type: LiPo 4S; • Energy: 89.2 Wh; Net Weight: 468 g; • Charging Temperature Range: 41° to 104°F (5° to 40°C) • Max Charging Power: 160 W. <p>4) <i>Battery Charger (595g-UAV):</i></p> <ul style="list-style-type: none"> • Charging Input: 100-240V, 50/60 Hz, 1.3 A; • Charging Output: Charging Port: 13.2 V=2.82 A, USB Port: 5 V=2 	
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	<p>A;</p> <ul style="list-style-type: none"> Voltage: 13.2 V; Rated Power: 38 W. <p>4) Battery Charger (1,375g-UAV):</p> <ul style="list-style-type: none"> Voltage: 17.4 V; Rated Power: 100 W. 	
<p>LOT 18: UAVs AND ACCESSORIES ABC: Php 499,800.00</p> <p>Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City</p>		
	<p>1) UAVs AND ACCESSORIES: 1 Set Hexacopter UAV 30min Max Flight Time w/ 5kg payload, 21kg Maximum Takeoff Weight: 1 Aircraft Body w/ FPV Camera, 1 RC Controller, 4 Flight Batteries, 1 Battery Charger, 6 Pairs Propellers, 1 Hard Case, 1 GCS Software ABC: Php 499,800.00</p>	
	<p>• In the box of Hexacopter UAV 30min Max Flight Time w/ 5kg payload, 21kg Maximum Takeoff Weight:</p> <ol style="list-style-type: none"> 1) 1 Hexacopter Aircraft Body w/ FPV Camera 2) 1 RC Controller 3) 4 Flight Battery 4 1 Battery Charger 5) 6 Pair Propellers 6) 1 Hard Case 7) Manuals 8) 1 GCS Software 9) At least 1 Year Warranty 	
	<p>• Specifications of Hexacopter UAV 30min Max Flight Time w/ 5kg payload, 21kg Maximum Takeoff Weight:</p>	
	<p>1) Aircraft:</p> <ul style="list-style-type: none"> 30min Max Flight Time w/ 5kg payload; 21kg Maximum Takeoff Weight; Weight w/o payload: 12.27kg; Max flight time: 45Min (w/o payload); Take Off and Landing: Auto, VTOL; Power source: Battery; Power: Electric Motor; Motor: Electric Brushless; Material: FRP composite, Carbon, Stainless, Aluminum; Number of Motors: 6 EA; Rotor type: Hexa; Payload Weight: 5-8 Kg; Size: 1350 (Motor to Motor) *700 (Height) mm; Max Operating Wind Speed: 13m/s; Max Speed: 17m/s; Cruise Speed: 0~17m/s; Max Ascent speed: 2.5m/s; Max descent speed: 1.5m/s; Max ceiling (Altitude) 3,000m; Satellite system: GPS GNSS; Operating temperature: -10~40 C; IPXX: IP43. <p>@Flight Control:</p> <ul style="list-style-type: none"> Single-board Flight Controller; Processor: STM32H7IIK 32-bit Arm® Cortex®-M7, Action Clock: 480MHz, 1MB RAM, 2MB Flash, DSP Instruction and Double-Precision FPU; Co-processor: STM32F100; Sensor: Accel/Gyro: ICM-20602, BMI088 / ISM330DLC, Magnetometer: BMM150, Barometer: DPS368 / BMP388 / MS5611, 8 Sensors: Acceleration/Gyro Sensor (3), Terrestrial Magnetic 	

	<p>Sensor (2), Air Pressure Sensor (3);</p> <ul style="list-style-type: none"> • Interface: 1 x Capture & Analog input port, 1 UART Port, 1 x I2C port, 2 UAVCAN Ports, • 3 Telemetry Ports, 2 GPS Ports, 1 Buzzar & USB Port, 1 USB-C type; • Power: 5V; Operating temperature: -10~55 C; • PWM: 8 Main PWM / 6 AUX PWM • UI: 3 LED Light, B/E, PWR Status indicator; • Update: Via GCS Software; FMUV6 Firmware, Compatible with Ardupilot /Autopilot; • Size: 44mm(W) x 85mm(H) x 18mm(D); <p>@Power Module:</p> <ul style="list-style-type: none"> • Module Type: 6S 24V Battery Type; Input Voltage: 5 ~ 30V; • Output Voltage: 3.3V, 5V, 12V, 16V; Max. Current: 4A; • Working Temperature: -40°C ~ 105°C; Size: 40mm(W) x 105mm(H) x 35mm(D); <p>@Camera: IP Camera; Full HD 1080P (1920 x 1080).</p> <p>2) RC Controller:</p> <ul style="list-style-type: none"> • Futaba 14SG Transmitter – 14-Channel Digital Proportional RC System; 2-stick; • T14SG transmitter frequency: 2.4 GHz band; system: FASSTest14CH, FASSTest12CH, FASST MULT, FASST 7CH, S-FHSS, switchable; power supply: 6.0 V HT5F1800B NiMH battery; • Receiver R7008SB: size: 24.9 x 47.3 x 14.3 mm (0.98 x 1.86 x 0.56 in); weight: 10.9 g (0.38 oz); • power requirements: DC 3.7~7.4V; voltage range: DC 3.5~8.4V; <p>3) Flight Battery</p> <ul style="list-style-type: none"> • Capacity: 25,000mAh x 2set = 50,000mA; • Voltage: 22.8V; Cell: 6S x 2Set; • Type: Lipo HV. 	
<p>LOT 19: UAV VIDEO CAMERAS AND ACCESSORIES ABC: Php 403,900.00</p> <p>Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City</p>		
	<p>1) 1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam: 20MP,23× Hybrid OZ,200x max zoom,compatible w/ Quad UAV (9kg Max Takeoff Wt.); and</p> <p>2) 1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam w/ quick release mechanism: 1/3” 3MP CMOS,30× OZ,Square Casing</p> <p><i>In the box of:</i></p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam: 20MP,23× Hybrid OZ,200x max zoom,compatible w/ Quad UAV (9kg Max Takeoff Wt.):</p> <ol style="list-style-type: none"> 1) 1 Camera 2) 1 Gimbal 3) 1 Storage Case 4) 1 Lens Cleaning Cloth 5) 1 64GB SD Card 	

	<p>6) Manuals 7) At least 1 Year Warranty</p> <p>In the box of:</p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam w/ quick release mechanism: 1/3" 3MP CMOS,30x OZ, Square Casing:</p> <ol style="list-style-type: none"> 1) 1 Camera 2) 1 Gimbal System 3) 1 Gimbal Quick release mechanism: control box and adapter 4) 2 Damping Board 5) 4 Copper Cylinders 6) 4 Anti shredding buckle 7) 16 Button head hexagon screw 8) Storage Case 9) 1 Lens Cleaning Cloth 10) 1 64GB SD Card 11) Manuals 12) At least 1 Year Warranty 	
	<p>Specifications of:</p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam: 20MP,23x Hybrid OZ,200x max zoom, compatible w/ Quad UAV (9kg Max Takeoff Wt.)</p> <p><i>Summary: 20 MP 1/1.7" CMOS Sensor, 23x Hybrid Optical Zoom, 200x max zoom, 4K/30fps video,66.6°-4° DFOV;12 MP 1/2.3" CMOS Sensor Wide Camera, 24mm focal length, 82.9° DFOV;3-1200m laser range finder;678±5 g;150x114x151 mm; compatible w/ Quadcopter UAV (55min Max Flight Time, 9kg Max Takeoff Weight).</i></p> <p>1) Camera</p> <ul style="list-style-type: none"> • Weight: 678±5 g; Dimensions: 150x114x151 mm; Ingress Protection Rating: IP44; • Operating Temperature: -20° to 50° C (Temp. Measurement is only available between -10° to 50° C); • Storage Temperature: -20° to 60° C; Laser Safety: Class 1M (IEC 60825-1:2014); • Supported Aircraft: Quadcopter UAV (55min Max Flight Time, 9kg Max Takeoff Weight). <p>@ Zoom Camera</p> <ul style="list-style-type: none"> • Sensor: 1/1.7" CMOS, 20 MP; • Lens: DFOV: 66.6°-4°, Focal length: 6.83-119.94 mm (equivalent: 31.7-556.2 mm), • Aperture: f/2.8-f/11 (normal), f/1.6-f/11 (night scene), • Focus: 1 m to ∞ (wide), 8 m to ∞ (telephoto); • Focus Mode: MF/AF-C/AF-S; Exposure Mode: Auto, Manual; • Exposure Compensation: ±3.0 (1/3 increments); • Metering Mode: Spot metering, Center-weighted metering; • AE LOCK: Supported; Electronic Shutter Speed: 1 ~ 1/8000 s; • ISO Range: Video: 100 – 25600; Photo: 100 – 25600; • Video Resolution: 3840x2160@30fps, 1920x1080@30fps; • Video Format: MP4, Video subtitles: Supported; • Photo Size: 5184 x 3888; Photo Format: JPEG. 	

	<p>@ Wide Camera</p> <ul style="list-style-type: none"> • Sensor: 1/2.3" CMOS, 12 MP; • Lens: DFOV: 82.9°, Focal length: 4.5 mm (equivalent: 24 mm), Aperture: f/2.8, Focus: 1 m to ∞; • Exposure Mode: Auto; Exposure Compensation: ±3.0 (1/3 increments); • Metering Mode: Spot metering, Center-weighted metering; • AE LOCK: Supported; Shutter Speed: 1 ~ 1/8000; • ISO Range: Video: 100 – 25600, Photo: 100 – 25600; • Video Resolution: 1920x1080@30fps; Video Format: MP4; Video subtitles: Supported; • Photo Size: 4056 x 3040; Photo Format: JPEG. <p>@ Laser Rangefinder</p> <ul style="list-style-type: none"> • Wave length: 905 nm; • Measurement range: 3-1200 m (to a vertical surface with ≥12m diameter and 20% reflection rate); • Measurement accuracy: ± (0.2 m + D×0.15%); D is the distance to a vertical surface. <p>@General</p> <ul style="list-style-type: none"> • Hybrid Optical Zoom: 23x (DFOV: 4°, EQV : 556.2mm); • Max. Zoom: 200x (DFOV: 0.5°, EQV : 4800mm) • High-Res Grid Photo: Frame an area of interest in wide camera view, and the zoom camera will automatically capture a set of 20 MP images of the area. These images are stored together with an overview image that can be viewed in greater detail; • Night Scene: Supported (zoom camera); • Timestamp: Including GPS, date, and time. <p>@Storage</p> <ul style="list-style-type: none"> • Supported SD Card: MicroSD card (Max capacity: 128 GB, UHS-1 Speed Grade 3 required); • Supported File Systems: FAT32 (≤ 32 GB), exFAT (> 32 GB); <p>2) Gimbal</p> <ul style="list-style-type: none"> • Angular Vibration Range: ±0.01°; Mount: Detachable; • Controllable Range: Pitch: -120° to +30°, Yaw: ±320°; • Mechanical Range: Pitch: -132.5° to +42.5°, Yaw: ±330°, Roll: -90° to +60°; 	
	<p>Specifications of:</p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam w/ quick release mechanism: 1/3" 3MP CMOS, 30x OZ, Square Casing</p> <p>Summary: 1 UAV camera w/ gimbal & quick release mechanism: 1/3" 3MP CMOS sensor, 30x Optical Zoom, 4.5-135mm focal length, 1080/30fps video; FOV: 54.8-3.4°(Hor.), 41-2.5°(Vert.), 66.6-7.2°(Focus); 848 g; 30Hz; Pitch: ±90° Roll: ±45° Yaw: ±150°; Square Casing (L149xW103xH138mm); Control interface: PWM, S. Bus & serial command.</p> <p>1) Camera</p> <ul style="list-style-type: none"> • Square Casing (L149xW103xH138mm); 	

	<ul style="list-style-type: none"> • <i>Total weight (gimbal and camera):848g;</i> • <i>Sensor: 1/3"3 MP CMOS Sensor;</i> • <i>Video Output: CVBS and 1080P/60 HDMI; Video recorded: 1080P/30 MP4;</i> • <i>Focal length: 30X optical focal zoom, 4.5-135mm; Wide Dynamic: Up to 105dB;</i> • <i>FOV: Horizontal: 54.8° (Wide end) ~ 3.4° (Tele end), Vertical: 41° (wide end) ~ 2.5° (tele end),</i> • <i>Focus: 66.6° (wide end) ~ 7.2° (tele end);</i> • <i>Auto focus: Less than 1S; Low illumination: 0.05lux@F1.6;</i> • <i>Aperture: Φ 16.0; Vertical Roll / Horizon Mirror/Static: Support;</i> • <i>AWB/AGC/ACC/: Support;</i> • <i>Working temperature: -25° ~ +60°.</i> <p>2) <i>Gimbal System</i></p> <ul style="list-style-type: none"> • <i>Input voltage: 3S-4S;</i> • <i>Rotate range: Pitch: ±90° Roll: ±45° Yaw: ±150°;</i> • <i>Angle amount of jitter: Pitch and roll: ±0.02° Yaw: ±0.03°;</i> • <i>Control interface: PWM, S.Bus and serial command;</i> • <i>Working Current: Static current: 330mA (@12V); Dynamic current: 450mA (@12V).</i> <p>3) <i>1 Gimbal Quick release mechanism: control box and adapter</i></p> <ul style="list-style-type: none"> • <i>Can supply power for the gimbal and camera, also will lead the video and data to the new control box so that you can get full control of the gimbal and camera.</i> • <i>The control box provides popular interfaces for flexible integration: HDMI, Analog, PWM, Serial command, and S.bus.</i> 	
<p>LOT 20: UAV VIDEO CAMERAS AND ACCESSORIES ABC: Php 196,100.00</p> <p>Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City</p>		
<p>UAV VIDEO CAMERAS AND ACCESSORIES: 1 Set Datalink: Ground Unit (95g/PCB) w/ antenna (85g) & UAV Module (58g/PCB) w/ antenna (22g); 2.4GHz,5.8GHz; Up to 300Mbps, optimal 20Mbps w/in 5km; Max 10km at LOS; addt'l 1 Air Unit; Antenna (sender): Omni Direction</p> <p style="text-align: right;">ABC: Php 196,100.00</p>		
<p><i>In the box of 1 Set Datalink:</i></p> <ol style="list-style-type: none"> 1) <i>1 Ground Unit w/ Antenna</i> 2) <i>1 UAV Module w/ Antenna, additional 1 air unit</i> 3) <i>Cables and Charger</i> 4) <i>Manuals</i> 5) <i>At least 1 Year Warranty</i> 		
<p><i>Specifications of 1 Set Datalink:</i></p> <p>@General</p> <ul style="list-style-type: none"> • <i>Operating Temperature: -20°C ~ +70°C;</i> • <i>Humidity: 5% to 95% (non-condensing);</i> • <i>Power: USB-C(1.5A) or DC Jack 5V;</i> • <i>Dimension: W105 x L100 x H18 mm (Ground Unit), W80 x L50 x H25 mm (UAV unit);</i> • <i>Weight (PCB Only): 95g (Ground Unit), 58g (UAV unit).</i> 		

	<p>@Wireless</p> <ul style="list-style-type: none"> • Standards: • IEEE802.11a/n/h/s for Wireless LAN, • IEEE802.11i for Wireless Security, • IEEE802.3u for 10/100/1000T(X) Full Duplex; • Operation Mode: Access Point, Bridge; • Wireless Standard: IEEE802.11a/b/g, 802.11n; • Frequency Range: 2.4GHz, 5.8GHz; • Rate: Optimal 20Mbps, Max 300Mbps; • Modulation: 11n (HT20/HT40) : MCS0 ~ MCS15 (OFDM); • Sensitivity: 5.8 GHz, OFDM 6Mbps : -90dBm, 54Mbps : -73dBm; • Bandwidth: Ability to configure 20 and 40MHz channel bandwidth, Transmit Power Control(TPC); • Device Managements: • Administrator ID/PW, Station & AP Associated Information, • System Information, Telnet/SSH Server Support, • Web-based Configuration, Upgrade through HTTP/TFTP, • Event Log (WEB Interface), Factory Default. <p>@Network Interface:</p> <ul style="list-style-type: none"> • 2 x Serial Ports, 1 x micro USB Port(USB to Serial), • 2 x USB2.0 Ports, 1 x LTE PCI-E Slot, 1 x USIM Slot, • 1 x Ethernet 10/100/1000BASE-T(RJ-45) Auto negotiation speed; • LAN / WAN: IP, Subnet, Gateway; • DHCP: Server/Client; • Protocol: • TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, • SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, ARP, DNS; • Security: • SSID Protection, 64bit-128bit WEP Encryption, 802.11i, AES and/or TKIP, • WPA2.0(with Radius Server or Pre- Shared Key), WPA, 802.1x Authentication, • IP/MAC Filtering (Allow, Deny), HTTPS(SSL) Encryption, Password Protection; • Operating Range: Max 10Km at LOS. <p>@Antenna:</p> <ul style="list-style-type: none"> • MIMO 2x2 Antenna Outdoor Type; • Receiver: • Frequency Range: 5150-5850Ghz; Beamwidth: Vertical 7° Horizontal 360°; • Gain: 12 dBi; Impedance: 50 Ω; Dimension: Φ14x490 mm; Weight: 85g. • Sender: • Frequency Range: 5150-5850Ghz; Type: Omni direction; • Gain: 6 dBi; Impedance: 50 Ω; Dimension: Φ15x150 mm; Weight: 22g. 	
<p>LOT 21: ON-BOARD COMPUTERS AND DEVELOPMENT KITS ABC: Php 410,000.00</p>		
<p>Delivery period: One Hundred Twenty (120) calendar days</p>		

Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
	1) 1 unit 256GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent;
	2) 1 unit 128GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent;
	3) 1 unit 100x87mm module or equivalent;
	4) 1 unit 32TOPS developer kit or equivalent;
	5) 1 unit 70x45mm module or equivalent; and
	6) 1 unit 21TOPS developer kit or equivalent
	<p><i>In the box of 1 256GB SATA-SSD onboard comp with OSDK expansion module, or equivalent:</i></p> <ul style="list-style-type: none"> 1) 1 Manifold 2-C 2) 1 Power Distribution Unit 3) 1 USB 3.0 Hub 4) 1 AC Power Adapter 5) 1 Button I/O Extension Unit 6) 1 Assembly Bracket Set 7) 1 AC Power Cable 8) CAN, UART, Micro USB, I/O, OTG Cables 9) Power Cables 10) Manuals 11) OSDK expansion module: Bracket A (upper) x 2, Bracket B (left) x 1, Bracket C (right) x 1, Bracket D (reinforcing rib) x 3, Bracket connection block x 4, OSDK adapter plate module x 1, USB cable (with two type-A ports) x 1, XT30 power cable x 1, Wire clip x 3, Foot pad x 3, Hand screw x 5, Screw A (M1.6) x 15, Screw B (M2.0) x 5, Screw C (M3.0) x 5, Screw D (M1.6 step) x 3, Screwdriver kit x 1. 12) At least 1 Year Warranty
	<p><i>In the box of 1 128GB SATA-SSD onboard comp with OSDK expansion module, or equivalent:</i></p> <ul style="list-style-type: none"> 1) 1 Manifold 2-G 2) 1 Power Distribution Unit 3) 1 USB 3.0 Hub 4) 1 AC Power Adapter 5) 1 Button I/O Extension Unit 6) 1 Assembly Bracket Set 7) 2 Wi-Fi Antenna 8) 1 AC Power Cable 9) CAN, UART, Micro USB, I/O, OTG Cables 10) Power Cables 11) Manuals 12) OSDK expansion module: Bracket A (upper) x 2, Bracket B (left) x 1, Bracket C (right) x 1, Bracket D (reinforcing rib) x 3, Bracket connection block x 4, OSDK adapter plate module x 1, USB cable (with two type-A ports) x 1, XT30 power cable x 1, Wire clip x 3, Foot pad x 3, Hand screw x 5, Screw A (M1.6) x 15, Screw B (M2.0) x 5, Screw C (M3.0) x 5, Screw D (M1.6 step) x 3, Screwdriver kit x 1. 13) At least 1 Year Warranty
	<i>In the box of 1 100x87mm module or equivalent:</i>

	<ol style="list-style-type: none"> 1) 1 Jetson AGX Xavier 32GB Module 2) At least 1 Year Warranty 	
	<p>In the box of 1 32 TOPS developer kit or equivalent:</p> <ol style="list-style-type: none"> 1) 1 Jetson® AGX Xavier™ module (P2888) with thermal solution 2) 1 Reference carrier board (P2822) 3) 1 Power supply with AC cord 4) 1 Type C to Type A cable (USB 3.1 Gen2) 5) Type C to Type A adapter (USB 3.1 Gen 1) 6) At least 1 Year Warranty 	
	<p>In the box of 1 70x45mm module or equivalent:</p> <ol style="list-style-type: none"> 1) 1 Jetson Xavier NX module 2) At least 1 Year Warranty 	
	<p>In the box of 1 21 TOPS developer kit w/ cloud-native support or equivalent:</p> <ol style="list-style-type: none"> 1) 1 Jetson Xavier NX module with heatsink. This version of the module (P3668-0000) is only for use in a developer kit and is not intended for production environments. 2) 1 Reference carrier board (P3509-0000) 3) 1 Power supply with AC cord 4) 1 19-volt power supply 5) 1 power cable 6) 1 802.11 plug-in WLAN and Bluetooth® module with antennas (assembled underneath the carrier board) 7) 1 small paper card with quick start and support information 8) At least 1 Year Warranty 	
	<p>Specifications of 1 256GB SATA-SSD onboard comp with OSDK expansion module or equivalent:</p> <p>1 set powerful onboard computer with OSDK expansion module or equivalent: Intel Core i7-8550U processor; 8GB 64 bit, DDR4 2400 MHz memory; 256 GB SATA-SSD; 91 x 61 x 35mm; 205g; 1000Mbps Ethernet RJ-45 Port; 5-60W; includes power distribution unit, hub, adapter, button I/O extension unit, assembly bracket set, cables, or equivalent:</p> <ul style="list-style-type: none"> • for robotics applications and real-time data analysis; • Model: MF2C or equivalent; • Weight: Approx. 205 g or equivalent; • Dimensions: 91 x 61 x 35 mm or equivalent; • Processor: Intel Core i7-8550U or equivalent; • Memory: 8GB 64 bit, DDR4 2400 MHz or equivalent; • eMMC: N/A; • SATA-SSD: 256 GB or equivalent; • Network: 1000Mbps Ethernet RJ-45 Port or equivalent; • USB: USB 3.0 Port (Type A) x 2, USB 3.0 Port (Micro-B) x 1 • I/O: UART Port 1; • Power: 5 - 60 W; • Power Supply: 15.2 - 27.0 V Power Port 2 Independent Power Supply; • Operating Temperature: -13 to 113 °F (-25 to 45 °C). • OSDK expansion module or equivalent As-assembled size: 200 x 120 x 40 mm. 	

	<p>Specifications of 1 128GB SATA-SSD onboard comp with OSDK expansion module or equivalent:</p> <p>1 set powerful onboard computer with OSDK expansion module or equivalent: NVIDIA Jetson TX2 processor; 8GB 128 bit, DDR4 1333 MHz memory; 128 GB SATA-SSD; 91 x 61 x 35mm; 230g; 1000Mbps Ethernet RJ-45 Port, Wi-Fi, Operating Frequency: 2.4 GHz, 5.8 GHz;3-25W; includes WiFi antenna, power distribution unit, hub, adapter, button I/O extension unit, assembly bracket set, cables, or equivalent:</p> <ul style="list-style-type: none"> • for AI, image processing, motion analysis, and object recognition; • Model: MF2G or equivalent; • Weight: Approx. 230 g; Dimensions: 91 x 61 x 35 mm or equivalent; • Processor: NVIDIA Jetson TX2 or equivalent; • Memory: 8GB 128 bit, DDR4 1333 MHz or equivalent; • eMMC: 32 GB (approx. 28 GB available) or equivalent; • SATA-SSD: 128 GB or equivalent; • Network: 1000Mbps Ethernet RJ-45 Port, Wi-Fi, Transmission Standard: IEEE, • 802.11a/b/g/n/ac, Max Transmission Speed: 866.7 Mbps, or equivalent • Operating Frequency: 2.4000 - 2.4835 GHz, 5.150 - 5.250 GHz*; • 5.250 - 5.350 GHz* or equivalent, • *limited to indoor use. • EIRP: < 20 dBm (2.4000 - 2.4835 GHz), < 20 dBm (5.150 - 5.250 GHz), < 23 dBm (5.250 - 5.350 GHz) or equivalent; • USB: USB 3.0 Port (Type A) x 2, USB 3.0 Port (Micro-B) x 1; • I/O: CAN Port 2, UART Port 2, I2C Port 1, SPI Port 1; • Power: 3 - 25 W; Power Supply: 13.2 - 27.0 V Power Port 2 Independent Power Supply; • Operating Temperature: -13 to 113 °F (-25 to 45 °C). • OSDK expansion module or equivalent As-assembled size: 200 x 120 x 40 mm. 	
	<p>Specifications of 1 100x87mm module or equivalent:</p> <p>1 high performance module: 100x87mm; 32 TOPS at 10W; GPU: NVIDIA Volta™ architecture w/ 512 NVIDIA CUDA cores & 64 Tensor cores; CPU: 8-Core Carmel ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3; Memory: 32 GB 256-bit LPDDR4x 136.5GB/s; Storage: 32 GB eMMC 5.1, or equivalent:</p> <ul style="list-style-type: none"> • GPU: NVIDIA Volta™ architecture with 512, NVIDIA CUDA cores and 64 Tensor cores, 22 TOPS (INT8) or equivalent; • CPU: 8-Core Carmel ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3 or equivalent; • Memory: 32 GB 256-bit LPDDR4x 136.5GB/s or equivalent; • Storage: 32 GB eMMC 5.1 or equivalent; • Video Encoder: 4x 4K60 (H.265) 8x 4K30 (H.265) 16x 1080p60 (H.265) 32x 1080p30 (H.265) 30x1080p30 (H.264) or equivalent; • Video Decoder: 2x 8K30 (H.265) 6x 4K60 (H.265) 12x 4K30 (H.265) 26x 1080p60 (H.265) 52x 1080p30 (H.265) 30x 1080p30 (H.264) or equivalent; • Connectivity: Wi-Fi requires external chip or equivalent; • Display: 3 multi-mode DP 1.4/eDP 1.4/HDMI 2.0 No DSI support or equivalent; 	

	<ul style="list-style-type: none"> • <i>Others: USB 2.0, UART, SPI, CAN, I2C, I2S, DMIC & DSPK, GPIOs or equivalent;</i> • <i>Mechanical: 100 x 87mm, 699 pin Molex Mirror Mezz Connector, Integrated Thermal Transfer Plate or equivalent;</i> • <i>UPHY: (8x) PCIe Gen4 / (8x) SLVS-EC, (3x) USB 3.1, Single Lane UFS or equivalent;</i> • <i>AI Perf: 32 TOPS or equivalent;</i> • <i>Power: 10W 15W 30W;</i> • <i>PCIe: 1 x8 + 1 x4 + 1 x2 + 2 x1 (PCIe Gen4, Root Port & Endpoint);</i> • <i>CSI Camera: Up to 6 cameras (36 via virtual channels) 16 lanes MIPI CSI-2 D-PHY 1.2 (up to 40Gbps) C-PHY 1.1 (up to 62Gbps);</i> • <i>DL Accelerator: 2x NVDLA Engines, 10 TOPS (INT8);</i> • <i>Vision Accelerator: 2x 7-Way VLIW Vision Processor;</i> • <i>Networking: 10/100/1000 BASE-T Ethernet.</i> 	
	<p>Specifications of 1 32 TOPS developer kit or equivalent:</p> <p><i>1 set high performance AI computer developer kit w/ thermal solution, carrier board, AC power supply: 32 TOPS; GPU: 512-Core Volta GPU w/ Tensor Cores; CPU: 8-Core ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3; Memory: 32 GB 256-Bit LPDDR4x 137 GB/s; Storage: 32 GB eMMC 5.1, or equivalent:</i></p> <ul style="list-style-type: none"> • <i>GPU: 512-Core Volta GPU with 64 Tensor Cores or equivalent;</i> • <i>CPU: 8-Core ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3 or equivalent;</i> • <i>Memory: 32 GB 256-Bit LPDDR4x 137 GB/s or equivalent;</i> • <i>Storage: 32 GB eMMC 5.1 or equivalent;</i> • <i>Video encoder: 4x 4K @ 60 (HEVC) 16x 1080p @ 60 (HEVC) 32x 1080p @ 30 (HEVC) or equivalent;</i> • <i>Video decoder: 2x 8K @ 30 (HEVC) 6x 4K @ 60 (HEVC) 26x 1080p @ 60 (HEVC) 72x 1080p @ 30 (HEVC) or equivalent;</i> • <i>Display HDMI 2.0 Type A, 2x DisplayPort via USB-C or equivalent;</i> • <i>USB: 2x USB-C 3.1 (supporting DisplayPort and USB PD), Micro-USB 2.0 (serial port interface only) or equivalent;</i> • <i>Others: M.2 Key M (NVMe), M.2 Key E (PCIe x1 + USB 2.0 + UART (for Wi-Fi/LTE) / I2S + DMIC + GPIOs), 40-pin header (UART, SPI, CAN, I2C, I2S, DMIC, GPIOs), MicroSD / UFS card slot, eSATAp (eSATA USB 3.0 Type-A), 10-pin audio header, 8-pin automation header (system power and related signals), 4-pin fan header;</i> • <i>Mechanical: 100 mm x87 mm x 65mm 699-pin connector or equivalent;</i> • <i>AI Perf: 32 TOPS or equivalent;</i> • <i>Power: 10W 15W 30W (DC power jack);</i> • <i>PCIe: x16 connector with x8 PCIe Gen4 or x8 SLVS-EC;</i> • <i>CSI Camera: Up to 6 cameras (36 via virtual channels) 16 lanes MIPI CSI-2 8 lanes SLVS-EC D-PHY 1.2 (up to 40 Gbps) C-PHY 1.1 (up to 91 Gbps);</i> • <i>DL Accelerator: 2x NVDLA Engines;</i> • <i>Vision Accelerator: 7-Way VLIW Vision Processor;</i> • <i>Networking: 10/100/1000 BASE-T Ethernet (RJ45, Gigabit Ethernet);</i> • <i>M2 KEY M: NVMe.</i> 	

	<p>Specifications of 1 70x45mm module or equivalent:</p> <p>1 small supercomputer module: 70x45mm; AI Perf: 21 TOPS at 15-20W; GPU: 384-core NVIDIA Volta™ GPU w/ 48 Tensor Cores; CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6MB L2 + 4MB L3; Memory: 8GB 128-bit LPDDR4x 59.7GB/s; Storage: 16 GB eMMC 5.1, or equivalent:</p> <ul style="list-style-type: none"> • GPU: 384-core NVIDIA Volta™ GPU with 48 Tensor Cores or equivalent; • CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6MB L2 + 4MB L3 or equivalent; • Memory: 8 GB 128-bit LPDDR4x 59.7GB/s or equivalent; • Storage: 16 GB eMMC 5.1 or equivalent; • Video Encoder: 2x 4K60 4x 4K30 10x 1080p60 22x 1080p30 (H.265) 2x 4K60 4x 4K30 10x 1080p60 20x 108p30 (H.264) or equivalent; • Video Decoder: 2x 8K30 6x 4K60 12x 4K30 22x 1080p60 44x 1080p30 (H.265) 2x 4K60 6x 4K30 10x 1080p60 22x 1080p30 (H.264) or equivalent; • Display: 2 multi-mode DP 1.4/eDP 1.4/HDMI 2.0 or equivalent; • Mechanical: 69.6 mm x 45 mm 260-pin SO-DIMM connector or equivalent; • AI Perf: 21 TOPS or equivalent; • Power: 10W 15W 20W; • PCIe: 1 x1 (PCIe Gen3) + 1 x4 (PCIe Gen4), total 144 GT/s; • CSI Camera: Up to 6 cameras (24 via virtual channels) 12 lanes (3x4 or 6x2) MIPI CSI-2 D-PHY 1.2 (up to 30 Gbps); • DL Accelerator: 2x NVDLA Engines; • Vision Accelerator: 7-Way VLIW Vision Processor; • Networking: 10/100/1000 BASE-T Ethernet. 	
	<p>Specifications of 1 21 TOPS dev. kit w/ cloud-native support or equivalent:</p> <p>1 set supercomputer developer kit w/ cloud-native support; w/ heatsink, carrier board & AC power supply; GPU: NVIDIA Volta™ architecture w/ 384 NVIDIA® CUDA® cores & 48 Tensor cores; CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6 MB L2 + 4 MB L3; 21 TOPS; Memory: 8GB 128-bit LPDDR4x 59.7GB/s; Camera: 2x MIPI CSI-2 D-PHY lanes, or equivalent:</p> <ul style="list-style-type: none"> • GPU: 384-core NVIDIA Volta™ GPU with 48 Tensor Cores or equivalent; • CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6 MB L2 + 4 MB L3 or equivalent; • Memory: 8 GB 128-bit LPDDR4x 59.7GB/s or equivalent; • Storage: microSD; • Video Encoder: 2x 4K60 4x 4K30 10x 1080p60 22x 1080p30 (H.265) 2x 4K60 4x 4K30 10x 1080p60 20x 108p30 (H.264) or equivalent; • Video Decoder: 2x 8K30 6x 4K60 12x 4K30 22x 1080p60 44x 1080p30 (H.265) 2x 4K60 6x 4K30 10x 1080p60 22x 1080p30 (H.264) or equivalent; • Connectivity: Gigabit Ethernet, M.2 Key E (WiFi/BT included), M.2 Key M (NVMe) or equivalent; • Camera: 2x MIPI CSI-2 D-PHY lanes; • Display: HDMI and DP; 	

	<ul style="list-style-type: none"> Others: GPIOs, I2C, I2S, SPI, UART; Mechanical: 103 mm x 90.5 mm x 34.66 mm or equivalent; AI Perf: 21 TOPS or equivalent; DL Accelerator: 2x NVDLA Engines; Vision accelerator: 7-Way VLIW Vision Processor; 	
LOT 22: FURNITURE & FIXTURES		ABC: Php 206,800.00
<p>Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City</p>		
	<p>1) L-Shaped Office Tables (7 Units) Details: 140cm x 140cm x 120cm; with: glass protection, lockable cabinet drawers, CPU holder</p>	
	<p>2) Office Tables (2 Units) Details: 120cm x 60cm x 75cm; light gray; with: one key lock system, 3 drawers, laminated in particle board</p>	
	<p>3) Stacking Chairs (10 Units) Details: black; fabric cover steel frame; stacking; with: big foam</p>	
	<p>4) Conference Table (2 Units) Details: Durable that can hold heavy equipment; 300cm x 120cm x 76cm; Materials: MDF Board Laminate Steel Structure</p>	
	<p>5) Large Rack (1 Unit) Details: 4-layer adjustable 200cm x 60cm x 200cm; 150kg per layer; color blue</p>	
	<ul style="list-style-type: none"> Free Delivery 	
LOT 23: FURNITURE & FIXTURES		ABC: Php 129,500.00
<p>Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City</p>		
	<p>1) High Back Chairs (7 Units) Details: 52cm x 55cm x 75cm; 52cm up & 45cm down; black; reclining; with: 47cm footrest leatherette upholstered</p>	
	<p>2) Office Chairs (4 Units) Details: mesh upholstered; chrome base; black; with: arm, tilt& lock mechanism</p>	
	<p>3) Executive Chair (1 Unit) Details: dark brown; high back; silver coated nylon base; with: arm, reclining mechanism</p>	
	<p>4) Counter Table with 5 Chairs (1 Set) Details: dimensions L180 x W70 x H105cm; Metal frame bar with wooden top; WITH high chairs</p>	
	<p>5) Foldable 8-Seater Table (1 Unit) Details: 8 ft fold in half; plastic material; metal frame; dimensions 244 x 76 x 74; color: white</p>	
	<p>6) Medium Lockable Office Cabinets (2 Units) Details: Two door office metal cabinet; swing door and lock; dimensions 120 x 90 x 40; light gray color</p>	
	<ul style="list-style-type: none"> Free Delivery 	
LOT 24: FURNITURE & FIXTURES		ABC: Php 76,450.00

Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	1) Large Office Sofa (1 Unit) Details: dimensions L33" x W91" x H67"; L-Type sofa; Leather upholstery; Color: black	
	2) Medium Lockable Office Cabinets (2 Units) Details: Size 400W x 550D x 650H mm; Medium cabinet; five-wheel caster with divider; powder beige color	
	3) Medium Lockable Office Cabinet (1 Unit) Details: Two pull-out steel door cabinet; 5 shelves; Dimensions: 900Wx 450D x 1802H mm	
	4) Large Rack (1 Unit) Details: Four-shelf open steel rack • 1 Year Warranty, Free Delivery	
LOT 25: One Lot: UAV control / telemetry visualization devices (SMARTPHONE) ABC: Php 23,000.00		
Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	SMARTPHONE (iOS) - Details: Onetime cash out payment for 24-month postpaid plan of one (1) unit iOS smartphone with 256 GB storage capacity and unlimited calls & texts	
LOT 26: One Lot: UAV control / telemetry visualization devices (TABLET) ABC: Php 35,000.00		
Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City		
	TABLET - 10.9-inch (diagonal)/64GB/iOS 14/Liquid Retina display/4K video recording at 24 fps, 30 fps, or 60 fps/A14 Bionic chip with 64-bit architecture, Neural Engine/Nano Sim; e-Sim/Touch ID; Three-axis gyro/USB-C Charger	

SCHEDULE OF REQUIREMENTS

Lot No.	Description Delivery Schedule / Place	Approved Budget (ABC)
	LOT 1: OFFICE LAPTOP AND ACCESSORIES	ABC: Php 170,000.00
	Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao, Mintal, Tugbok District, Davao City	
	LOT 2: OFFICE LAPTOP AND ACCESSORIES	ABC: Php 150,000.00
	Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao, Mintal, Tugbok District, Davao City	
	LOT 3: OFFICE LAPTOP AND ACCESSORIES	ABC: Php 130,000.00
	Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao, Mintal, Tugbok District, Davao City	
	LOT 4: OFFICE DESKTOP WITH OFFICE SUITE	ABC: Php 300,000.00
	Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
	LOT 5: LAPTOP WITH GPU AND ACCESSORIES	ABC: Php 400,000.00
	Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
	LOT 6: LASER COLORED PRINTER	ABC: Php 127,000.00
	Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
	LOT 7: WORKSTATION WITH GPU AND ACCESSORIES	ABC: Php 1,375,000.00
	Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
	LOT 8: AIR CONDITIONING UNITS	ABC: Php 330,000.00
	Delivery period: Thirty (30) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
	LOT 9: BIOMETRIC LOCK ASSEMBLY	ABC: Php 27,500.00
	Delivery period: Thirty (30) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	

LOT 10: QR-BASED INVENTORY SYSTEM	ABC: Php 28,660.00
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 11: CCTV KIT	ABC: Php 93,840.00
Delivery period: Thirty (30) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 12: UAV LIDAR SENSORS AND ACCESSORIES	ABC: Php 610,000.00
Delivery period: One Hundred Fifty (150) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 13: MULTISPECTRAL/HYPERSPECTRAL CAMERA(S) AND ACCESSORIES	ABC: Php 450,000.00
Delivery period: Sixty (60) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 14: 3D PRINTER	ABC: Php 145,000.00
Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 15: COMPUTING STATION WITH GPU AND HIGH-CAPACITY STORAGE AND ACCESSORIES	ABC: Php 1,000,000.00
Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 16: UAVs AND ACCESSORIES	ABC: Php 610,600.00
Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 17: UAVs AND ACCESSORIES	ABC: Php 89,600.00
Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 18: UAVs AND ACCESSORIES	ABC: Php 499,800.00
Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 19: UAV VIDEO CAMERAS AND ACCESSORIES	ABC: Php 403,900.00
Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 20: UAV VIDEO CAMERAS AND ACCESSORIES	ABC: Php 196,100.00

Delivery period: Ninety (90) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 21: ON-BOARD COMPUTERS AND DEVELOPMENT KITS	ABC: Php 410,000.00
Delivery period: One Hundred Twenty (120) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 22: FURNITURE & FIXTURES	ABC: Php 206,800.00
Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 23: FURNITURE & FIXTURES	ABC: Php 129,500.00
Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 24: FURNITURE & FIXTURES	ABC: Php 76,450.00
Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 25: One Lot: UAV control / telemetry visualization devices (SMARTPHONE)	ABC: Php 23,000.00
Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
LOT 26: One Lot: UAV control / telemetry visualization devices (TABLET)	ABC: Php 35,000.00
Delivery period: Forty-five (45) calendar days Delivery and Installation: CARIM Bldg., UP Mindanao Mintal, Tugbok District, Davao City	
GRAND TOTAL: Php 8,017,750.00	

Price Schedule for Goods Offered from Within the Philippines
[shall be submitted with the Bid if bidder is offering goods from within the Philippines]

For Goods Offered from Within the Philippines

Name of Bidder _____ Project ID No. _____ Page ____ of ____

1	2	3	4	5	6	7	8	9	10
Item	Description	Country of origin	Quantity	Unit price EXW per item	Transportation and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)
	LOT 1: Office Laptop and Accessories								
1	Office Laptop and Accessories (1 Unit) <ul style="list-style-type: none"> • Operating System: macOS • Chip: M1 chip with 8-core CPU, 8-core GPU and 16-core Neural Engine • Display: 13.3" (diagonal) LED-backlit display IPS or better • Memory: 16GB RAM or bigger • Storage: 2TB SSD or bigger • With Office Suite and multi-touch rechargeable mouse (2.16 cm H x 5.71 cm W x 11.35 cm D; 0.099 kg; long-lasting internal battery, bluetooth and wireless connections) • Secure Authentication: Touch Bar and Touch ID Sensor • Accessories: Bag, Kensington lock • At least 2 years warranty 		1						

	LOT 2: Office Laptop and Accessories								
1	Office Laptop and Accessories (1 Unit) <ul style="list-style-type: none"> ● Operating System: macOS ● Chip: M1 chip with 8-core CPU, 8-core GPU and 16-core Neural Engine ● Display: 13.3" (diagonal) LED-backlit display IPS or better ● Memory: 16GB RAM or bigger ● Storage: 2TB SSD or bigger ● With Office Suite and multi-touch rechargeable mouse (2.16 cm H x 5.71 cm W x 11.35 cm D; 0.099 kg; long-lasting internal battery, bluetooth and wireless connections) ● Secure Authentication: Touch ID Sensor ● Accessories: Bag, Kensington lock ● At least 2 years warranty 		1						
	LOT 3: Office Laptop and Accessories								
1	Office Laptop and Accessories (1 Unit) <ul style="list-style-type: none"> ● Operating System: macOS ● Chip: M1 chip with 8-core CPU, 8-core GPU and 16-core Neural Engine ● Display: 13.3" (diagonal) LED-backlit display IPS or better ● Memory: 16GB RAM or bigger ● Storage: 1TB SSD or bigger ● With Office Suite and multi-touch rechargeable mouse (2.16 cm H x 5.71 cm W x 11.35 cm D; 0.099 kg; long-lasting internal battery, bluetooth and wireless connections) ● Secure Authentication: Touch ID Sensor ● Accessories: 4TB External Hard Drive USB-C USB 3.0, Thunderbolt / USB 4 multiport adapter (HDMI, USB-C, USB-3.0, VGA, Ethernet, SD/Micro SD Card Slot), Bag, Kensington lock ● At least 2 years warranty 		1						
	LOT 4: Office Desktop with Office Suite								
1	Office Desktop with Office Suite (3 Units) <ul style="list-style-type: none"> ● Operating System: Windows 10 Pro or Windows 11 ● Processor: AMD Ryzen 7 or better; Intel Core i5 or better ● Graphics: NVIDIA/AMD GPU with 6GB RAM or higher ● Display: 24-27" IPS LED Monitor or bigger; at least 1080P 		3						

	<p>resolution</p> <ul style="list-style-type: none"> ● Memory: 16GB RAM or bigger ● Storage: 512G SSD + 2TB HDD or bigger ● Accessories: USB noiseless optical 2-button mouse w/ mousepad, USB Keyboard, etc. ● Inclusions: <ul style="list-style-type: none"> ● Office Suite ● Uninterruptible Power Supply (UPS) with at least 30 minutes' runtime capacity ● At least 2 years warranty 								
	LOT 5: Laptop with GPU and Accessories								
1	<p>Laptop with GPU and Accessories (2 Units)</p> <ul style="list-style-type: none"> ● Operating System: Windows 10 Pro 64 bit ● Processor: Intel Core i7 or equivalent ● Graphics: RTX3080 Ti 12GB GDDR6X or equivalent ● Display: 15.60" 1920 x 1080 120Hz or equivalent/better ● Memory: 32G RAM or bigger ● Storage: 2TB SSD + 1TB HDD or bigger ● Accessories: Bag, Kensington lock, wireless noiseless optical 2-button mouse w/ mousepad, etc. ● At least 2 years warranty 		2						
	LOT 6: Laser Colored Printer								
1	<p>Laser Colored Printer (1 Set)</p> <ul style="list-style-type: none"> ● Functions: Printer, Copier, Scanner ● Copier Type: Digital ● Max Original Size: A3/Ledger (11.7 in x 17 in) ● Printing Technology - Output: Laser – Colored ● Office Machine Features: Save to USB flash drive, scan to e-mail, scan to folder, scan to network ● Display Features: Touch Screen ● Max Printing Resolution: Up to 600 x 600 dpi (mono) / up to 600 x 600 dpi (color) ● Document Feeder: ADF ● Inclusions: <ul style="list-style-type: none"> ● Set of Consumable Cartridges (C,M,Y,K) ● At least 1 Year Warranty for accessories; Spare parts replacement free of charge for 1 Year; Repair service is free for two years 		1						

	LOT 7: Workstation with GPU and Accessories								
1	Workstation with GPU and Accessories (5 units) <ul style="list-style-type: none"> ● Operating System: Windows 10 Pro 64 bit ● Processor: Intel Core i9 or better; Intel Xeon or equivalent ● Graphics: 2x NVIDIA RTX2080 8GD6 or equivalent ● Display: 24-27" double screen configuration or bigger, tilt pivot swivel height adjustable or better, LED edge light, IPS FHD 1920 x 1080 120Hz or bigger ● Memory: 64G RAM or bigger ● Storage: 2TB SSD + 4TB HDD or bigger ● Connectivity: Ethernet and Wi-Fi ● Power Supply: 1200 Watts or bigger ● Accessories: UPS (30mins-1hour runtime) at least 80 Plus Gold, USB noiseless optical 2-button mouse w/ mousepad, USB Keyboard ● At least 2 years warranty 		5						
	LOT 8: Air Conditioning Units								
1	Air Conditioning Units (3 units) <ul style="list-style-type: none"> ● 0.5HP-0.8HP Aircon ● Specifications: Inverter, Split-type ● Inclusions: Remote, bracket, installation supplies & materials, labor fee and delivery fee ● at least 1 year warranty 		3						
2	Air Conditioning Units (2 units) <ul style="list-style-type: none"> ● 1.5HP Aircon ● Specifications: Inverter, Split-type ● Inclusions: Remote, bracket, installation supplies & materials, labor fee and delivery fee ● at least 1 year warranty 		2						
3	Air Conditioning Units (3 units) <ul style="list-style-type: none"> ● 2.5HP Aircon ● Specifications: Inverter, Split-type ● Inclusions: Remote, bracket, installation supplies & materials, labor fee and delivery fee ● at least 1 year warranty 		3						
	LOT 9: Biometric Lock Assembly								

1	Biometric Lock Assembly <ul style="list-style-type: none"> • Multi-purpose System: Card Access, Fingerprint, PIN; Infrared Detection Sensor • Single Door Magnetic Locks; Push Button Exit Switch • Access Control Power Supply with Battery; Buzzer and multi-color LED • IP65 rated rugged waterproof and dustproof structure • Inclusions: <ul style="list-style-type: none"> • 10 dual purpose Integrated Circuit (IC) Cards and company ID (front & back design) • Cabling Materials • Installation Fee • at least 1 year warranty 		1						
LOT 10: QR-Based Inventory System									
1	QR-Based Inventory System <ul style="list-style-type: none"> • Wireless; Handheld; Supports 1D/2D Wireless Barcode Scanner with memory card (auto charging) • QR code generator, scanner, and software • Compact Barcode Printer (Label Satin - Ribbon included) • Free training • at least 1 year warranty 		1						
LOT 11: CCTV Kit									
1	CCTV Kit <ul style="list-style-type: none"> • Internet Protocol (IP) Cameras • Up to 30 fps; 3-axis adjustment for flexible mounting on a wall or ceiling; Integrated IR-cut filter & IR LEDs; IP 66-67; High Dynamic Range technology; 3D noise reduction; Configurable video motion detection alarms. Inclusions: • Ten (10) Units of Vandal Dome Indoor Cameras - 1/2.8" progressive scan CMOS; 1920 x 1080@30fps; 2.8 mm/4 mm fixed lens; H.265+/H.265/H.264+/H.264; Dual stream; Digital WDR (Wide Dynamic Range); 3D DNR (Digital Noise Reduction); Up to 30 m IR range; PoE (Power over Ethernet); IP67; IK10 • Four (4) Units of Bullet Outdoor Cameras - 1/2.8" progressive scan CMOS; 1920 x 1080@30fps; 2.8 mm/4 mm fixed lens; H.265+/H.265/H.264+/H.264; Dual stream; Digital WDR (Wide Dynamic Range); 3D DNR (Digital Noise Reduction); Up to 30 m IR range; PoE (Power over Ethernet); IP67 		1						

	<ul style="list-style-type: none"> • One (1) Unit of Pan-Tilt-Zoom Outdoor Camera - 1/2.7" 2Megapixel CMOS; Powerful 4x optical zoom; Support Triple-streams encoding; WDR, Day/Night(ICR); Ultra DNR; Max. 25/30fps@1080P, 25/30/50/60fps@720P; IVS; Support PoE; IR distance up to 30m • One (1) Unit of Network Video Recorder (NVR) - Embedded 4K NVR; Third-party network cameras supported; Up to 8MP resolution recording; Support 1-ch HDMI, 1-ch VGA, HMDI at up to 4K(3840x2160) resolution; 16-ch network cameras can be connected with 160M/256M incoming bandwidth; Up to 4 SATA interfaces; Support dual-os to ensure high reliability of system running; Support various VCA detection alarm and VCA search; Support H.265/H.264/ MPEG4 video formats • One (1) Unit of POE Switch 16 port • RJ 45 Connectors, UTP Cable CAT 5E, Cables, and Related Wiring/Conduit Materials, Assemblies, and Equipment • Delivery and Installation Fee (Fare & Allowance) • at least 1 year warranty 								
	LOT 12: UAV LiDAR Sensors and Accessories								
1	UAV LiDAR Sensors and Accessories (2 Sets) <ul style="list-style-type: none"> • 1) 1 unit Small and compact LiDAR; 590g 16ch LiDAR Sensors; RJ45 Connector; Power Adapter; Ethernet Cable; Interface box (IFB) with ~3 m cable connecting sensor and IFB. INS/GPS antenna/Interface included: GPS18x LVC receiver pre-configured/Programmed; At least 1 Year Warranty; and • 2) 1 unit Small Scanning Laser Range Finder; 2D sensor; 130g excluding cables; long distance, wide range, high speed; 20m scanning distance; 60m max detection distance; Ethernet 100Base-TX Interface, 12/24VDC Power supply; 270degrees scanning range zone; 0.25degrees angular resolution; 25ms per scan - scanning time; IP65; Inclusions: Pre-cable for power and ethernet connection; At least 1 Year Warranty 		1						
	LOT 13: Multispectral/Hyperspectral Camera(s) and Accessories								
1	Multispectral/Hyperspectral Camera(s) and Accessories (2 Sets) <ul style="list-style-type: none"> • 2 Units of Multispectral sensor camera, each with: <ul style="list-style-type: none"> • 1-year license Pix4Dfields software; • 16MP RGB Camera and Four cameras for capturing 		1						

	<p>images of four bands: green, red, red edge and near infrared;</p> <ul style="list-style-type: none"> • 72g; • 64GB internal memory capacity; • WiFi and USB access; • Sunshine sensor for automatic adjustment of readings to ambient light; • GPS, IMU and Magnetometer; • Slot for optional SD card to add memory and ease data transfer • at least 1 year warranty 								
	LOT 14: 3D Printer								
1	<p>3D PRINTER (2 Sets)</p> <ul style="list-style-type: none"> • 2 units of Original Assembled 3D printer, each with: • Build volume (25 x 21 x 21 cm 9.84 x 8.3 x 8.3 in) • Layer height (0.05 – 0.35 mm) • Max travel speed (200+ mm/s) • Max hotend/heatbed temp. (300 °C / 120 °C (572 °F / 248 °F)) • Mainboard (Einsy RAMBo 8-bit board with Trinamic 2130 drivers co-developed with Ultimachine) • Has IR Filament sensor • Comes with free 1kg filament spool of Silver PLA • at least 1 year warranty 		1						
	LOT 15: Computing Station with GPU and High-Capacity Storage and Accessories								
1	<p>Computing Station with GPU and High-Capacity Storage and Accessories</p> <ul style="list-style-type: none"> • OS: Win10Pro64 bit/Ubuntu 20.04.3 LTS • CPU: AMD Ryzen Threadripper 3960X 24-Core TRX40 or similar w/ CPU Cooler • Motherboard: Gigabyte TR40X Aorus Master or similar • RAM: Corsair Vengeance LPX 8x16gb or similar • GPU: 2 x RTX 3090 24gb with NVLink or similar • CASE: Thermaltake Core p8 or similar • PSU: Seasonic PRIME 1300 watts 80+ platinum or similar • SSD: 980 PCIe 3.0 NVMe M.2 2280 1TB or similar • SSD: 3 x 2TB SSD 2.5" SATA 3 or similar • NAS Synology 8-bay DS1821+ or similar • HDD: 8 x Exos X16 16TB Enterprise or similar 		1						

	<ul style="list-style-type: none"> • APC UPS for superworkstation; 1440VA • APC UPS for NAS; 500VA • Monitor: dual (27" x 2 + dual monitor stand) or curved (49" CRG9 dual QHD HDR1000 and QLED AMD Radeon(TM) FreeSync(TM) 2 and 120Hz refresh rate) or similar • Accessories: USB noiseless optical 2-button mouse w/ mousepad, USB Keyboard, etc. • at least 2 years warranty 								
	LOT 16: UAVs and Accessories (1 Set)								
1	<p>UAVs AND ACCESSORIES: 1 Set Quadcopter UAV w/ 55min Max Flight Time, 9kg Max Takeoff Weight: 1 Aircraft Body,1 Smart Controller w/ Battery, 4 Flight Batteries, 1 Battery Station, 1 Carrying Case, Cables & Charger, Propellers & Holders, Spare Parts, Screws</p> <p>In the box of Quadcopter UAV w/ 55min Max Flight Time, 9kg Max Takeoff Weight:</p> <ol style="list-style-type: none"> 1) 1 Quadcopter Aircraft Body 2) 1 Smart Controller Enterprise 3) 4 TB60 Intelligent Flight Battery 4) 1 BS60 Intelligent Battery Station 5) 1 USB Charger 6) 1 USB-C Cable 7) 2 2110 Propellers (Clockwise) 8) 2 2110 Propellers (Counter-Clockwise) 9) 2 Landing Gear 10) 1 Pair Spare Stick Cover 11) 2 Pairs Propeller Holder 12) 4 Spare Gimbal Damper 13) 1 USB Cable with Double A Ports 14) 1 Vision System Calibration Plate 15) 1 Carrying Case 16) 1 Smart Controller Lanyard 17) 1 Set Rubber Port Cover 18) Screws and Tools 19) 1 WB37 Intelligent Battery for the Smart Controller 20) 1 Power Cable 21) 1 Pair Spare Control Stick 22) Manuals 	1							

23) At least 1 Year Warranty

Specifications of Quadcopter UAV w/ 55min Max Flight Time, 9kg Max Takeoff Weight:

1) Aircraft

- 55 min Max Flight Time; 9 kg Max Takeoff Weight;
- Weight (with single downward gimbal): Approx. 3.6 kg (w/o batteries),
- Approx. 6.3 kg (w/ 2 TB60 batteries);
- 2.7 kg Max payload capacity; 930g Single Gimbal Damper's Max Payload;
- 15 km Transmission Range; 1080p Triple-channel Video;
- FPV Camera: 960P Resolution, 145° FOV, 30fps frame rate;
- Operating Frequency: 2.4000-2.4835 GHz, 5.725-5.850 GHz;
- 23 m/s Max Flight Speed; 15 m/s Max Wind Resistance;
- Dimensions: Unfolded, propellers excluded, 810x670x430 mm (LxWxH),
- Folded, propellers included, 430x420x430 mm (LxWxH);
- Operating Temperature: -20°C to 50°C;
- @Vision System:
- Obstacle Sensing Range: Forward/Backward/Left/Right: 0.7-40m;
- Upward/Downward: 0.6-30m;
- FOV: Forward/Backward/Downward: 65° (H), 50° (V);
- Left/Right/Upward: 75°(H), 60°(V);
- Operating Environment: Surfaces with clear patterns and adequate lighting (> 15 lux);
- @Infrared ToF Sensing System:
- Obstacle Sensing Range: 0.1-8m; FOV: 30° (±15°);
- Operating Environment: Large, diffuse and reflective obstacles (reflectivity >10%).
- @Top and bottom auxiliary light: Effective lighting distance: 5m.
- @General:
- Automate inspections with Live Mission Recording and AI Spot Check;
- Advanced algorithms enable PinPoint and Smart Track to obtain dynamic location information for subjects in view;
- 6 Directional Sensing and Positioning system enhances flight safety;
- Password-protected access to aircraft and data;
- AirSense ADS-B Receiver warns of nearby airplanes and helicopters;
- Secure data transmission with AES-256 encryption;
- App with Local Data Mode protects drone data.

2) Smart Controller

- @OcuSync Enterprise:
- Operation Frequency Range: 2.400-2.4835 GHz; 5.725-5.850

	<p>GHz 1;</p> <ul style="list-style-type: none"> • Max Transmission Distance (Unobstructed, free of interference): NCC / FCC: 15 km; CE / MIC: 8 km; SRRC: 8 km; Transmitter Power (EIRP): 2.400-2.4835 GHz: 29.5 dBm (FCC); 18.5 dBm (CE) ; 18.5 dBm (SRRC); 18.5 dBm (MIC), 5.725-5.850 GHz: 28.5 dBm (FCC); 12.5 dBm (CE); 20.5 dBm (SRRC). • @Wi-Fi: • Protocol: Wi-Fi Direct, Wi-Fi Display, 802.11a/g/n/ac, Wi-Fi with 2x2 MIMO is supported; • Operation Frequency Range 2.400-2.4835 GHz; 5.150-5.250 GHz 1; 5.725-5.850 GHz • Transmitter Power (EIRP): 2.400-2.4835 GHz: 20.5 dBm (FCC); 18.5 dBm (CE); 18.5 dBm (SRRC); 20.5 dBm (MIC) 5.150-5.250 GHz: 14 dBm (FCC); 14 dBm (CE); 14 dBm (SRRC); 14 dBm (MIC), 5.725-5.850 GHz: 18 dBm (FCC); 12 dBm (CE); 18 dBm (SRRC). • @Bluetooth: • Protocol Bluetooth: 4.2; Operation Frequency Range: 2.400-2.4835 GHz; • Transmitter Power (EIRP): 4 dBm (FCC); 4 dBm (CE); 4 dBm (SRRC); 4 dBm (MIC) • @General: • External Battery: Name: WB37 Intelligent Battery; • Capacity: 4920 mAh; Voltage: 7.6 V; • Type: LiPo; Energy: 37.39 Wh; • Charge Time (Using BS60 Intelligent Battery Station): 70 min (15° to 45° C); 130 min (0° to 15° C) • Built-in Battery: Battery Type: 18650 Li-ion (5000 mAh @ 7.2 V); • Charge Type: Supports USB charger rated 12 V / 2 A; • Rated Power: 17 W 2; • Charge Time: 2 hours and 15 minutes (Using a USB charger rated 12 V / 2 A); • Working Time: 2 Built-in Battery: Approx. 2.5 hours; • Built-in Battery + External Battery: Approx. 4.5 hours; • Storage Capacity: ROM 32GB + RAM 4GB; • Video Output Port: HDMI Port; • Power Supply Voltage / Current (USB-A port): 5 V / 1.5 A; • Operation Temperature Range: -20° to 40° C (-4° to 104° F); • GNSS: GPS+GLONASS; • Weight: External Battery excluded: Approx. 885 g; • External Battery included: Approx. 1054 g. • Dimensions (Antennas folded): 178x164x108 mm <p>3) TB60 Intelligent Flight Battery</p> <ul style="list-style-type: none"> • Capacity: 5935 mAh; • Voltage: 52.8 V; Battery Type: LiPo 12S; • Energy: 274 Wh; Net Weight: Approx. 1.35 kg; • Operating Temperature: -4°F to 122°F (-20°C to 50°C); • Ideal storage temperature: 71.6°F to 86°F (22°C to 30°C); 								
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	<ul style="list-style-type: none"> Charging Temperature: -4°F to 104°F (-20°C to 40°C); (When the temperature is lower than 5°C, the self-heating function will be automatically enabled. Charging in a low temperature may shorten the lifetime of the battery) Charging time: Using BS60 Intelligent Battery Station: <ul style="list-style-type: none"> 220V input: 60 minutes (fully charging two TB60 batteries), 30 minutes (charging two TB60 batteries from 20% to 90%) 110V input: 70 minutes (fully charging two TB60 batteries), 40 minutes (charging two TB60 batteries from 20% to 90%). <p>4) BS60 Intelligent Battery Station</p> <ul style="list-style-type: none"> Dimensions: 501*403*252mm; Net Weight: 8.37kg; Maximum Capacity: TB60 Intelligent Flight Battery x 8; WB37 Intelligent Battery x 4; Input: 100-120 VAC, 50-60 Hz / 220-240 VAC, 50-60 Hz; Max. Input Power: 1070W; Output Power: 100-120 V: 750 W; 220-240 V: 992 W; Operating Temperature: -4°F to 104°F (-20°C to 40°C). 								
	LOT 17: UAVs and Accessories								
1	<p>UAVs AND ACCESSORIES: 1 Set Quadcopter UAV w/ at least 30min Max Flight Time, 595g to 1, 375g Takeoff Weight: 1 Aircraft Body, 1 Remote Controller, 1-3 Flight Batteries, 1 Battery Charger, 1 Shoulder Bag or Carrying Case, 4 to 6 Pairs Propellers</p> <p>• In the box:</p> <p>-If 595g-UAV Quadcopter w/ at least 30min Max Flight Time:</p> <ol style="list-style-type: none"> 1 Quadcopter Aircraft Body 1 RC-N1 Remote Controller 3 Intelligent Flight Battery 1 Battery Charger 1 AC Power Cable 6 Pair Low-Noise Propellers 1 Gimbal Protector 1 Type-C Cable 1 RC Cable (USB Type-C Connector) 1 RC Cable (Lightning Connector) 1 RC Cable (Standard Micro-USB Connector) 1 Pair Spare RC-N1 Control Sticks 1 ND Filters Set (ND4/8/16/32) 1 Battery Charging Hub 1 Battery to Power Bank Adaptor 1 Shoulder Bag 		1						

	<p>17) 1 Sandisk 64GB Extreme SD Card 18) Manuals 19) At least 1 Year Warranty</p> <p>• In the box: -If 1,375g-UAV Quadcopter w/ at least 30min Max Flight Time:</p> <ol style="list-style-type: none"> 1) 1 Aircraft Body 2) 1 Remote Controller 3) 1 Intelligent Flight Battery 4) 1 Battery Charger 5) 1 Power Cable 6) 4 Pair Propellers 7) 1 Gimbal Clamp 8) 1 Micro-USB Cable 9) 1 Carrying Case 10) 1 Sandisk 64GB Extreme SD Card 11) Manuals 12) At least 1 Year Warranty <p>Specifications of UAV Quadcopter w/ 595g to 1,375g Takeoff Weight and at least 30min Max Flight Time:</p> <p>1) Aircraft (595g-UAV & 1,375g-UAV):</p> <ul style="list-style-type: none"> • at least 30min Max Flight Time; 595g to 1,375g Takeoff Weight (Battery & Propellers included); • Dimensions (595g-UAV): Folded: 180x97x77 mm (l×w×h), Unfolded: 183x253x77 mm (l×w×h); • Diagonal Length: 302 (595g-UAV) or 350 mm (1,375g-UAV); • Max Ascent & Descent Speed (595g-UAV): 6 m/s (S and N Mode); • Max Ascent Speed (1,375g-UAV): S-mode: 6 m/s, P-mode: 5 m/s, • Max Descent Speed (1,375g-UAV): S-mode: 4 m/s, P-mode: 3 m/s; • Max Service Ceiling Above Sea Level: 5000 m (595g-UAV), 6000 m (1,375g-UAV); • Max Flight Distance (no wind): 18.5 km (595g-UAV); • Max Wind Speed Resistance: 10.7 m/s (595g-UAV), 10m/s (1,375g-UAV); • Max Tilt Angle (595g-UAV): 35° (S Mode), Front: 30°, Back: 20°, Left: 35°, Right: 35° (N Mode); • Max Tilt Angle (1,375g-UAV): S-mode: 42°, A-mode: 35°, P-mode: 25°; • Max Angular Velocity (595g-UAV): 250°/s (S Mode), 90°/s (N Mode), 60°/s (C Mode); • Max Angular Speed (1,375g-UAV): S-mode: 250°/s, A-mode: 150°/s; • Hovering Accuracy Range: • Vertical (595g- & 1,375g-UAV): ± 0.1 m (with vision positioning), 								
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	<ul style="list-style-type: none"> ± 0.5 m (with GNSS positioning); • Horizontal (595g-UAV): ± 0.1 m (with vision positioning), ± 1.5 m (with GNSS positioning); • Horizontal (1,375g-UAV): ± 0.3 m (with vision positioning), ± 1.5 m (with GNSS positioning); • Propellers (595g-UAV): Quick release, low noise, folding; Aircraft Arms (595g-UAV): Foldable; • GNSS: GPS+GLONASS+GALILEO (595g-UAV), GPS+GLONASS (1,375g-UAV); • Compass (595g-UAV): Single Compass; IMU (595g-UAV): Single IMU; • Internal Storage (595g-UAV): 8 GB. • @Camera (595g-UAV): • Sensor: 1" CMOS, Effective Pixels: 20 MP; 2.4µm Pixel Size; • Lens: FOV: 88°, 35 mm Format Equivalent: 22 mm, Aperture: f/2.8, Shooting Range: 0.6 m to ∞; • Still Image Size: 20 MP, 5472x3648 (3:2), 5472x3078 (16:9); • Video Resolution: 5.4K: 5472x3078 @ 24/25/30 fps, • 4K Ultra HD: 3840x2160 @ 24/25/30/48/50/60 fps, • 2.7K: 2688x1512 @ 24/25/30/48/50/60 fps, • FHD: 1920x1080 @ 24/25/30/48/50/60/120 fps, • MP4/MOV (H.264/MPEG-4 AVC, H.265/HEVC); • Max Video Bitrate: 150 Mbps; • Supported File System: FAT32/exFAT, Supports a microSD card with a capacity of up to 256 GB. • Digital Zoom: Zoom recording is not available while recording 10-bit videos and 120fps videos. • 4K/30fps: 4x, 2.7K/60fps: 4x, 2.7K/30fps: 6x, 1080p/60fps: 6x, 1080p/30fps: 8x. • @Camera (1,375g-UAV): • Sensor: 1-inch CMOS, Effective pixels: 20M; • Lens: FOV 84° 8.8 mm/24 mm (35 mm format equivalent) f/2.8-f/11 auto focus at 1 m-∞ • Image Size: 3:2 Aspect Ratio: 5472x3648, 4:3 Aspect Ratio: 4864x3648, 16:9 Aspect Ratio: 5472x3078. • Video Recording Modes: • H.265: C4K: 4096x2160 24/25/30p @100Mbps, 4K: 3840x2160 24/25/30p @100Mbps, • 2.7K:2720x1530 24/25/30p @65Mbps, 2.7K: 2720x1530 48/50/60p @80Mbps, • FHD: 1920x1080 24/25/30p @50Mbps, FHD: 1920x1080 48/50/60p @65Mbps, • FHD: 1920x1080 120p @100Mbps, HD:1280x720 24/25/30p @25Mbps, • HD: 1280x720 48/50/60p @35Mbps, HD: 1280x720 120p @60Mbps; • H.264: C4K: 4096x2160 24/25/30/48/50/60p @100Mbps, 								
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	<ul style="list-style-type: none"> • 4K: 3840x2160 24/25/30/48/50/60p @100Mbps, 2.7K: 2720x1530 24/25/30p @80Mbps, • 2.7K: 2720x1530 48/50/60p @100Mbps, FHD: 1920x1080 24/25/30p @60Mbps, • FHD: 1920x1080 48/50/60 @80Mbps, FHD: 1920x1080 120p @100Mbps, • HD: 1280x720 24/25/30p @30Mbps, HD: 1280x720 48/50/60p @45Mbps, • HD: 1280x720 120p @80Mbps; • Max Video Bitrate: 100 Mbps; • Supported File Systems: FAT32 (≤32 GB); exFAT (>32 GB); • Supported SD Cards: microSD Max Capacity: 128 GB; • Photo: JPEG, DNG (RAW), JPEG + DNG; Video: MP4/MOV (AVC/H.264; HEVC/H.265); <p>@Gimbal (595g-UAV):</p> <ul style="list-style-type: none"> • Stabilization: 3-axis (tilt, roll, pan), • Mechanical Range: Tilt: -135° to 45°, Roll: -45° to 45°, Pan: -100° to 100°; • Pan Axis: Not Controllable, • Controllable Range: Tilt: -90° to 0°(default), -90° to 24° (extended), • Max Controllable Speed (tilt): 100°/s, • Angular Vibration Range: ±0.01°. <p>@Gimbal (1,375g-UAV):</p> <ul style="list-style-type: none"> • Stabilization: 3-axis (pitch, roll, yaw), • Controllable Range: Pitch: -90° to +30°, • Max Controllable Angular Speed: Pitch: 90°/s, • Angular Vibration Range: ±0.02°. <p>@Vision Sensing System (595g-UAV):</p> <ul style="list-style-type: none"> • Forward: Precision Measurement Range: 0.38-23.8 m, Effective Sensing Speed: ≤15 m/s, • Field of View (FOV): 72° (horizontal), 58° (vertical); • Backward: Precision Measurement Range: 0.37-23.4 m, Effective Sensing Speed: ≤12 m/s, • Field of View (FOV): 57° (horizontal), 44° (vertical); • Downward: ToF Measurement Range: 0.1-8 m, Hovering Range: 0.5-30 m, • Vision Sensor Hovering Range: 0.5-60 m; • Left/Right: N/A; • Upward: Precision Measurement Range: 0.34-28.6 m, • Field of View (FOV): 63° (horizontal), 78° (vertical); • Downward Auxiliary Light: Single LED. <p>@Vision Sensing System (1,375g-UAV):</p> <ul style="list-style-type: none"> • Forward Vision System: 60° (Horizontal), ±27° (Vertical), • Backward Vision System: 60° (Horizontal), ±27° (Vertical), 								
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	<ul style="list-style-type: none"> Downward Vision System: 70° (Front and Rear), 50° (Left and Right). <p>@Video Transmission (595g-UAV):</p> <ul style="list-style-type: none"> Operating Frequency: 2.4 GHz, 5.8 GHz; Transmission Power (EIRP): 2.4 GHz: FCC: ≤30 dBm, CE: ≤20 dBm, SRRC: ≤20 dBm, MIC: ≤20 dBm; 5.8 GHz: FCC: ≤30 dBm, CE: ≤14 dBm, SRRC: ≤29 dBm; Transmission System: O3, 2.4 GHz/5.8 GHz Auto-Switching (compatible with OcuSync 2.0), 4-antenna 2T4R; Max Transmission Distance: 12 km (FCC), 8 km (CE), 8 km (SRRC), 8 km (MIC); Live View Quality/Latency: Drone + Remote Controller: 1080p/30fps 12 Mbps 120 ms, UAV + Smart Controller: 1080p/30fps 12Mbps 130 ms; Max Transmission Bitrate: 44 Mbps (download bitrate), 16 Mbps (live video bitrate); Operating Temperature Range: 0° to 40°C (32° to 104°F). <p>@Video Transmission (1,375g-UAV):</p> <ul style="list-style-type: none"> Operating Frequency: 2.400-2.483 GHz and 5.725-5.850 GHz; Transmitter Power (EIRP): 2.400-2.483 GHz: FCC: 26 dBm, CE: 20 dBm, SRRC: 20 dBm, MIC: 17 dBm; 5.725-5.850 GHz: FCC: 26 dBm, CE: 14 dBm, SRRC: 20 dBm, MIC: -; Max Transmission Distance: (Unobstructed, free of interference) FCC: 10000 m, CE: 6000 m, SRRC: 6000 m, MIC: 6000 m; Live View Working Frequency: 2.4 GHz ISM, 5.8 GHz ISM; Live View Quality: 720P @ 30fps, 1080P @ 30fps; Latency: 220 ms (depending on conditions and mobile device) Operating Temperature Range: 32° to 104°F (0° to 40°C) <p>2) Remote Controller (595g-UAV):</p> <ul style="list-style-type: none"> Multiple Controllers: N/A; Smart Controller: Supported; Remote Controller Transmission System: Ocusync3; Battery Life: 6 hours (4 hours when charging a mobile device); Supported Mobile Device Connectors: Lightning, Micro USB, USB-C; Max Supported Mobile Device Size: 180x86x10 mm (l×w×h) Operating Temperature: 0° to 40°C (32° to 104°F); Transmitter Power (EIRP): 2.4 GHz: FCC: ≤26 dBm, CE: ≤20 dBm, SRRC: ≤20 dBm, MIC: ≤20 dBm; 5.8 GHz: FCC: ≤26 dBm, CE: ≤14 dBm, SRRC: ≤26 dBm. <p>2) Remote Controller (1,375g-UAV):</p> <ul style="list-style-type: none"> Operating Frequency: 2.400-2.483 GHz and 5.725-5.850 GHz; 								
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	<ul style="list-style-type: none"> • Max Transmission Distance: 2.400-2.483 GHz, 5.725-5.850 GHz (Unobstructed, free of interference) FCC: 10000 m, CE: 6000 m, SRRC: 6000 m, MIC: 6000 m; Remote Controller Transmission System: OcuSync 2.0 HD; • Battery: 6000 mAh LiPo 2S; • Operating Current/Voltage: 1.2 A@7.4 V; • Video Output Port: GL300K: HDMI, GL300L: USB; • Mobile Device Holder: GL300K: Built-in display device (5.5-inch screen, 1920×1080, 1000 cd/m2, Android system, 4 GB RAM+16 GB ROM), GL300L: Tablets and smart phones; • Operating Temperature Range: 32° to 104°F (0° to 40°C); • Transmitter Power (EIRP): 2.400-2.483 GHz: FCC: 26 dBm, CE: 20 dBm, SRRC: 20 dBm, MIC: 17 dBm; • 5.725-5.850 GHz: FCC: 26 dBm, CE: 14 dBm, SRRC: 20 dBm, MIC: -. <p>3) Intelligent Flight Battery (595g-UAV):</p> <ul style="list-style-type: none"> • Capacity: 3500 mAh; Voltage: 11.55 V; Battery Type: LiPo 3S; • Max Charging Voltage: 13.2 V; • Energy: 40.42 Wh; Weight: 198 g; • Charging Temperature Range: 5° to 40°C (41° to 104°F); • Max Charging Power: 38 W; • Built-in Battery: N/A. <p>3) Intelligent Flight Battery (1,375g-UAV):</p> <ul style="list-style-type: none"> • Capacity: 5870 mAh; Voltage: 15.2 V; Battery Type: LiPo 4S; • Energy: 89.2 Wh; Net Weight: 468 g; • Charging Temperature Range: 41° to 104°F (5° to 40°C) • Max Charging Power: 160 W. <p>4) Battery Charger (595g-UAV):</p> <ul style="list-style-type: none"> • Charging Input: 100-240V, 50/60 Hz, 1.3 A; • Charging Output: Charging Port: 13.2 V=2.82 A, USB Port: 5 V=2 A; • Voltage: 13.2 V; Rated Power: 38 W. <p>4) Battery Charger (1,375g-UAV):</p> <ul style="list-style-type: none"> • Voltage: 17.4 V; Rated Power: 100 W. 								
	LOT 18: UAVs and Accessories								

1	<p>UAVs AND ACCESSORIES: 1 Set Hexacopter UAV 30min Max Flight Time w/ 5kg payload, 21kg Maximum Takeoff Weight: 1 Aircraft Body w/ FPV Camera,1 RC Controller, 4 Flight Batteries, 1 Battery Charger, 6 Pairs Propellers, 1 Hard Case, 1 GCS Software</p>		1						
	<p>• In the box of Hexacopter UAV 30min Max Flight Time w/ 5kg payload, 21kg Maximum Takeoff Weight:</p> <ol style="list-style-type: none"> 1) 1 Hexacopter Aircraft Body w/ FPV Camera 2) 1 RC Controller 3) 4 Flight Battery 4) 1 Battery Charger 5) 6 Pair Propellers 6) 1 Hard Case 7) Manuals 8) 1 GCS Software 9) At least 1 Year Warranty <p>Specifications of Hexacopter UAV 30min Max Flight Time w/ 5kg payload, 21kg Maximum Takeoff Weight:</p> <p>1) Aircraft:</p> <ul style="list-style-type: none"> • 30min Max Flight Time w/ 5kg payload; 21kg Maximum Takeoff Weight; • Weight w/o payload: 12.27kg; Max flight time: 45Min (w/o payload); • Take Off and Landing: Auto, VTOL; Power source: Battery; Power: Electric Motor; • Motor: Electric Brushless; Material: FRP composite, Carbon, Stainless, Aluminum; • Number of Motors: 6 EA; Rotor type: Hexa; Payload Weight: 5-8 Kg; • Size: 1350 (Motor to Motor) *700 (Height) mm; • Max Operating Wind Speed: 13m/s; Max Speed: 17m/s; • Cruise Speed: 0~17m/s; Max Ascent speed: 2.5m/s; Max descent speed: 1.5m/s; • Max ceiling (Altitude) 3,000m; Satellite system: GPS GNSS; • Operating temperature: -10~40 C; IPXX: IP43. <p>@Flight Control:</p> <ul style="list-style-type: none"> • Single-board Flight Controller; • Processor: STM32H7IIK 32-bit Arm® Cortex®-M7, Action Clock: 480MHz, 1MB RAM, 2MB Flash, • DSP Instruction and Double-Precision FPU; • Co-processor: STM32F100; • Sensor: Accel/Gyro: ICM-20602, BMI088 / ISM330DLC, • Magnetometer: BMM150, Barometer: DPS368 / BMP388 / MS5611, • 8 Sensors: Acceleration/Gyro Sensor (3), Terrestrial Magnetic Sensor (2), Air Pressure Sensor (3); 								

	<ul style="list-style-type: none"> Interface: 1 x Capture & Analog input port, 1 UART Port, 1 x I2C port, 2 UAVCAN Ports, 3 Telemetry Ports, 2 GPS Ports, 1 Buzzer & USB Port, 1 USB-C type; Power: 5V; Operating temperature: -10~55 C; PWM: 8 Main PWM / 6 AUX PWM UI: 3 LED Light, B/E, PWR Status indicator; Update: Via GCS Software; FMUV6 Firmware, Compatible with Ardupilot /Autopilot; Size: 44mm(W) x 85mm(H) x 18mm(D); <p>@Power Module:</p> <ul style="list-style-type: none"> Module Type: 6S 24V Battery Type; Input Voltage: 5 ~ 30V; Output Voltage: 3.3V, 5V, 12V, 16V; Max. Current: 4A; Working Temperature: -40°C ~ 105°C; Size: 40mm(W) x 105mm(H) x 35mm(D); <p>@Camera: IP Camera; Full HD 1080P (1920 x 1080).</p> <p>2) RC Controller:</p> <ul style="list-style-type: none"> Futaba 14SG Transmitter – 14-Channel Digital Proportional RC System; 2-stick; T14SG transmitter frequency: 2.4 GHz band; system: FASSTest14CH, FASSTest12CH, FASST MULT, FASST 7CH, S-FHSS, switchable; power supply: 6.0 V HT5F1800B NiMH battery; Receiver R7008SB: size: 24.9 x 47.3 x 14.3 mm (0.98 x 1.86 x 0.56 in); weight: 10.9 g (0.38 oz); power requirements: DC 3.7~7.4V; voltage range: DC 3.5~8.4V; <p>3) Flight Battery</p> <ul style="list-style-type: none"> Capacity: 25,000mAH x 2set = 50,000mA; Voltage: 22.8V; Cell: 6S x 2Set; Type: Lipo HV. 								
	<p>LOT 19: UAVs and Accessories</p>								
1	<p>1) 1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam: 20MP,23x Hybrid OZ,200x max zoom,compatible w/ Quad UAV (9kg Max Takeoff Wt.); and</p> <p>2) 1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam w/ quick release mechanism: 1/3" 3MP CMOS,30x OZ,Square Casing</p> <p><i>In the box of:</i></p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam: 20MP,23x Hybrid OZ,200x max zoom,compatible w/ Quad UAV (9kg</p>		1						

<p>Max Takeoff Wt.):</p> <ol style="list-style-type: none"> 1) 1 Camera 2) 1 Gimbal 3) 1 Storage Case 4) 1 Lens Cleaning Cloth 5) 1 64GB SD Card 6) Manuals 7) At least 1 Year Warranty <p>In the box of:</p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam w/ quick release mechanism: 1/3" 3MP CMOS,30x OZ, Square Casing:</p> <ol style="list-style-type: none"> 1) 1 Camera 2) 1 Gimbal System 3) 1 Gimbal Quick release mechanism: control box and adapter 4) 2 Damping Board 5) 4 Copper Cylinders 6) 4 Anti shredding buckle 7) 16 Button head hexagon screw 8) Storage Case 9) 1 Lens Cleaning Cloth 10) 1 64GB SD Card 11) Manuals 12) At least 1 Year Warranty <p>Specifications of:</p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam: 20MP,23x Hybrid OZ,200x max zoom, compatible w/ Quad UAV (9kg Max Takeoff Wt.)</p> <p>Summary: 20 MP 1/1.7" CMOS Sensor, 23x Hybrid Optical Zoom, 200x max zoom, 4K/30fps video,66.6°-4° DFOV;12 MP 1/2.3" CMOS Sensor Wide Camera, 24mm focal length, 82.9° DFOV;3-1200m laser range finder;678±5 g;150x114x151 mm; compatible w/ Quadcopter UAV (55min Max Flight Time, 9kg Max Takeoff Weight).</p> <p>1) Camera</p> <ul style="list-style-type: none"> • Weight: 678±5 g; Dimensions: 150x114x151 mm; Ingress Protection Rating: IP44; • Operating Temperature: -20° to 50° C (Temp. Measurement is only available between -10° to 50° C); • Storage Temperature: -20° to 60° C; Laser Safety: Class 1M (IEC 60825-1:2014); • Supported Aircraft: Quadcopter UAV (55min Max Flight Time, 9kg Max Takeoff Weight). <p>@ Zoom Camera</p>								
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	<ul style="list-style-type: none"> • Sensor: 1/1.7" CMOS, 20 MP; • Lens: DFOV: 66.6°-4°, Focal length: 6.83-119.94 mm (equivalent: 31.7-556.2 mm), • Aperture: f/2.8-f/11 (normal), f/1.6-f/11 (night scene), • Focus: 1 m to ∞ (wide), 8 m to ∞ (telephoto); • Focus Mode: MF/AF-C/AF-S; Exposure Mode: Auto, Manual; • Exposure Compensation: ±3.0 (1/3 increments); • Metering Mode: Spot metering, Center-weighted metering; • AE LOCK: Supported; Electronic Shutter Speed: 1 ~ 1/8000 s; • ISO Range: Video: 100 – 25600; Photo: 100 – 25600; • Video Resolution: 3840x2160@30fps, 1920x1080@30fps; • Video Format: MP4, Video subtitles: Supported; • Photo Size: 5184 x 3888; Photo Format: JPEG. <p>@ Wide Camera</p> <ul style="list-style-type: none"> • Sensor: 1/2.3" CMOS, 12 MP; • Lens: DFOV: 82.9°, Focal length: 4.5 mm (equivalent: 24 mm), Aperture: f/2.8, Focus: 1 m to ∞; • Exposure Mode: Auto; Exposure Compensation: ±3.0 (1/3 increments); • Metering Mode: Spot metering, Center-weighted metering; • AE LOCK: Supported; Shutter Speed: 1 ~ 1/8000; • ISO Range: Video: 100 – 25600, Photo: 100 – 25600; • Video Resolution: 1920x1080@30fps; Video Format: MP4; Video subtitles: Supported; • Photo Size: 4056 x 3040; Photo Format: JPEG. <p>@ Laser Rangefinder</p> <ul style="list-style-type: none"> • Wave length: 905 nm; • Measurement range: 3-1200 m (to a vertical surface with ≥12m diameter and 20% reflection rate); • Measurement accuracy: ± (0.2 m + D×0.15%); D is the distance to a vertical surface. <p>@General</p> <ul style="list-style-type: none"> • Hybrid Optical Zoom: 23x (DFOV: 4°, EQV : 556.2mm); • Max. Zoom: 200x (DFOV: 0.5°, EQV : 4800mm) • High-Res Grid Photo: Frame an area of interest in wide camera view, and the zoom camera will automatically capture a set of 20 MP images of the area. These images are stored together with an overview image that can be viewed in greater detail; • Night Scene: Supported (zoom camera); • Timestamp: Including GPS, date, and time. <p>@Storage</p> <ul style="list-style-type: none"> • Supported SD Card: MicroSD card (Max capacity: 128 GB, UHS-1 Speed Grade 3 required); • Supported File Systems: FAT32 (≤ 32 GB), exFAT (> 32 GB); 								
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	<p>2) Gimbal</p> <ul style="list-style-type: none"> Angular Vibration Range: $\pm 0.01^\circ$; Mount: Detachable; Controllable Range: Pitch: -120° to $+30^\circ$, Yaw: $\pm 320^\circ$, Mechanical Range: Pitch: -132.5° to $+42.5^\circ$, Yaw: $\pm 330^\circ$, Roll: -90° to $+60^\circ$; <p>Specifications of:</p> <p>1 UAV Vid Camera w/ high optical zoom (OZ): 1 gimbal cam w/ quick release mechanism: 1/3" 3MP CMOS, 30x OZ, Square Casing</p> <p>Summary: 1 UAV camera w/ gimbal & quick release mechanism: 1/3" 3MP CMOS sensor, 30x Optical Zoom, 4.5-135mm focal length, 1080/30fps video; FOV: 54.8-3.4°(Hor.), 41-2.5°(Vert.), 66.6-7.2°(Focus); 848 g; 30Hz; Pitch: $\pm 90^\circ$ Roll: $\pm 45^\circ$ Yaw: $\pm 150^\circ$; Square Casing (L149xW103xH138mm); Control interface: PWM, S. Bus & serial command.</p> <p>1) Camera</p> <ul style="list-style-type: none"> Square Casing (L149xW103xH138mm); Total weight (gimbal and camera): 848g; Sensor: 1/3" 3 MP CMOS Sensor; Video Output: CVBS and 1080P/60 HDMI; Video recorded: 1080P/30 MP4; Focal length: 30X optical focal zoom, 4.5-135mm; Wide Dynamic: Up to 105dB; FOV: Horizontal: 54.8° (Wide end) ~ 3.4° (Tele end), Vertical: 41° (wide end) ~ 2.5° (tele end), Focus: 66.6° (wide end) ~ 7.2° (tele end); Auto focus: Less than 1S; Low illumination: 0.05lux@F1.6; Aperture: Φ 16.0; Vertical Roll / Horizon Mirror/Static: Support; AWB/AGC/ACC/: Support; Working temperature: -25° ~ $+60^\circ$. <p>2) Gimbal System</p> <ul style="list-style-type: none"> Input voltage: 3S-4S; Rotate range: Pitch: $\pm 90^\circ$ Roll: $\pm 45^\circ$ Yaw: $\pm 150^\circ$; Angle amount of jitter: Pitch and roll: $\pm 0.02^\circ$ Yaw: $\pm 0.03^\circ$; Control interface: PWM, S.Bus and serial command; Working Current: Static current: 330mA(@12V); Dynamic current: 450mA(@12V). <p>3) 1 Gimbal Quick release mechanism: control box and adapter</p> <ul style="list-style-type: none"> Can supply power for the gimbal and camera, also will lead the video and data to the new control box so that you can get full control of the gimbal and camera. The control box provides popular interfaces for flexible integration: HDMI, Analog, PWM, Serial command, and S.bus 								
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	LOT 20: UAVs and Accessories								
1	<p>UAV VIDEO CAMERAS AND ACCESSORIES: 1 Set Datalink: Ground Unit (95g/PCB) w/ antenna (85g) & UAV Module (58g/PCB) w/ antenna (22g); 2.4GHz,5.8GHz; Up to 300Mbps, optimal 20Mbps w/in 5km; Max 10km at LOS; addt'l 1 Air Unit; Antenna (sender): Omni Direction</p> <p><i>In the box of 1 Set Datalink:</i></p> <ol style="list-style-type: none"> 1) 1 Ground Unit w/ Antenna 2) 1 UAV Module w/ Antenna, additional 1 air unit 3) Cables and Charger 4) Manuals 5) At least 1 Year Warranty <p><i>Specifications of 1 Set Datalink:</i></p> <p>@General</p> <ul style="list-style-type: none"> • Operating Temperature: -20°C ~ +70°C; • Humidity: 5% to 95% (non-condensing); • Power: USB-C(1.5A) or DC Jack 5V; • Dimension: W105 x L100 x H18 mm (Ground Unit), W80 x L50 x H25 mm (UAV unit); • Weight (PCB Only): 95g (Ground Unit), 58g (UAV unit). <p>Specifications of 1 Set Datalink:</p> <p>@General</p> <ul style="list-style-type: none"> • Operating Temperature: -20°C ~ +70°C; • Humidity: 5% to 95% (non-condensing); • Power: USB-C(1.5A) or DC Jack 5V; • Dimension: W105 x L100 x H18 mm (Ground Unit), W80 x L50 x H25 mm (UAV unit); • Weight (PCB Only): 95g (Ground Unit), 58g (UAV unit). <p>@Wireless</p> <ul style="list-style-type: none"> • Standards: • IEEE802.11a/n/h/s for Wireless LAN, • IEEE802.11i for Wireless Security, • IEEE802.3u for 10/100/1000T(X) Full Duplex; • Operation Mode: Access Point, Bridge; • Wireless Standard: IEEE802.11a/b/g, 802.11n; • Frequency Range: 2.4GHz, 5.8GHz; • Rate: Optimal 20Mbps, Max 300Mbps; • Modulation: 11n (HT20/HT40) : MCS0 ~ MCS15 (OFDM); • Sensitivity: 5.8 GHz, OFDM 6Mbps : -90dBm, 54Mbps : - 	1							

	<p>73dBm;</p> <ul style="list-style-type: none"> • Bandwidth: Ability to configure 20 and 40MHz channel bandwidth, Transmit Power Control(TPC); • Device Managements: • Administrator ID/PW, Station & AP Associated Information, • System Information, Telnet/SSH Server Support, • Web-based Configuration, Upgrade through HTTP/TFTP, • Event Log (WEB Interface), Factory Default. <p>@Network Interface:</p> <ul style="list-style-type: none"> • 2 x Serial Ports, 1 x micro USB Port(USB to Serial), • 2 x USB2.0 Ports, 1 x LTE PCI-E Slot, 1 x USIM Slot, • 1 x Ethernet 10/100/1000BASE-T(RJ-45) Auto negotiation speed; • LAN / WAN: IP, Subnet, Gateway; • DHCP: Server/Client; • Protocol: • TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, • SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, ARP, DNS; • Security: • SSID Protection, 64bit-128bit WEP Encryption, 802.11i, AES and/or TKIP, • WPA2.0(with Radius Server or Pre- Shared Key), WPA, 802.1x Authentication, • IP/MAC Filtering (Allow, Deny), HTTPS(SSL) Encryption, Password Protection; • Operating Range: Max 10Km at LOS. <p>@Antenna:</p> <ul style="list-style-type: none"> • MIMO 2x2 Antenna Outdoor Type; • Receiver: • Frequency Range: 5150-5850Ghz; Beamwidth: Vertical 7° Horizontal 360°; • Gain: 12 dBi; Impedance: 50 Ω; Dimension: Φ14x490 mm; Weight: 85g. • Sender: • Frequency Range: 5150-5850Ghz; Type: Omni direction; • Gain: 6 dBi; Impedance: 50 Ω; Dimension: Φ15x150 mm; Weight: 22g. 								
	<p>LOT 21: ON-BOARD COMPUTERS AND DEVELOPMENT KITS</p>								

1	<p>1) 1 unit 256GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent;</p> <p>2) 1 unit 128GB SATA-SSD ON-BOARD COMPUTER w/ OSDK expansion module or equivalent;</p> <p>3) 1 unit 100x87mm module or equivalent;</p> <p>4) 1 unit 32TOPS developer kit or equivalent;</p> <p>5) 1 unit 70x45mm module or equivalent; and</p> <p>6) 1 unit 21TOPS developer kit or equivalent.</p> <p>In the box of 1 256GB SATA-SSD onboard comp with OSDK expansion module, or equivalent:</p> <p>1) 1 Manifold 2-C 2) 1 Power Distribution Unit 3) 1 USB 3.0 Hub 4) 1 AC Power Adapter 5) 1 Button I/O Extension Unit 6) 1 Assembly Bracket Set 7) 1 AC Power Cable 8) CAN, UART, Micro USB, I/O, OTG Cables 9) Power Cables 10) Manuals 11) OSDK expansion module: Bracket A (upper) x 2, Bracket B (left) x 1, Bracket C (right) x 1, Bracket D (reinforcing rib) x 3, Bracket connection block x 4, OSDK adapter plate module x 1, USB cable (with two type-A ports) x 1, XT30 power cable x 1, Wire clip x 3, Foot pad x 3, Hand screw x 5, Screw A (M1.6) x 15, Screw B (M2.0) x 5, Screw C (M3.0) x 5, Screw D (M1.6 step) x 3, Screwdriver kit x 1. 12) At least 1 Year Warranty</p> <p>In the box of 1 128GB SATA-SSD onboard comp with OSDK expansion module, or equivalent:</p> <p>1) 1 Manifold 2-G 2) 1 Power Distribution Unit 3) 1 USB 3.0 Hub 4) 1 AC Power Adapter 5) 1 Button I/O Extension Unit 6) 1 Assembly Bracket Set 7) 2 Wi-Fi Antenna 8) 1 AC Power Cable 9) CAN, UART, Micro USB, I/O, OTG Cables</p>		1						
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	<p>10) Power Cables 11) Manuals 12) OSDK expansion module: Bracket A (upper) x 2, Bracket B (left) x 1, Bracket C (right) x 1, Bracket D (reinforcing rib) x 3, Bracket connection block x 4, OSDK adapter plate module x 1, USB cable (with two type-A ports) x 1, XT30 power cable x 1, Wire clip x 3, Foot pad x 3, Hand screw x 5, Screw A (M1.6) x 15, Screw B (M2.0) x 5, Screw C (M3.0) x 5, Screw D (M1.6 step) x 3, Screwdriver kit x 1. 13) At least 1 Year Warranty</p> <p>In the box of 1 100x87mm module or equivalent:</p> <p>1) 1 Jetson AGX Xavier 32GB Module 2) At least 1 Year Warranty</p> <p>In the box of 1 32 TOPS developer kit or equivalent:</p> <p>1) 1 Jetson® AGX Xavier™ module (P2888) with thermal solution 2) 1 Reference carrier board (P2822) 3) 1 Power supply with AC cord 4) 1 Type C to Type A cable (USB 3.1 Gen2) 5) Type C to Type A adapter (USB 3.1 Gen 1) 6) At least 1 Year Warranty</p> <p>In the box of 1 70x45mm module or equivalent:</p> <p>1) 1 Jetson Xavier NX module 2) At least 1 Year Warranty</p> <p>In the box of 1 21 TOPS developer kit w/ cloud-native support or equivalent:</p> <p>1) 1 Jetson Xavier NX module with heatsink. This version of the module (P3668-0000) is only for use in a developer kit and is not intended for production environments. 2) 1 Reference carrier board (P3509-0000) 3) 1 Power supply with AC cord 4) 1 19-volt power supply 5) 1 power cable 6) 1 802.11 plug-in WLAN and Bluetooth® module with antennas (assembled underneath the carrier board) 7) 1 small paper card with quick start and support information 8) At least 1 Year Warranty</p> <p>Specifications of 1 256GB SATA-SSD onboard comp with OSDK expansion module or equivalent:</p> <p>1 set powerful onboard computer with OSDK expansion module or</p>								
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<p>equivalent: Intel Core i7-8550U processor; 8GB 64 bit, DDR4 2400 MHz memory; 256 GB SATA-SSD; 91 x 61 x 35mm; 205g; 1000Mbps Ethernet RJ-45 Port; 5-60W; includes power distribution unit, hub, adapter, button I/O extension unit, assembly bracket set, cables, or equivalent:</p> <ul style="list-style-type: none"> • for robotics applications and real-time data analysis; • Model: MF2C or equivalent; • Weight: Approx. 205 g or equivalent; • Dimensions: 91 x 61 x 35 mm or equivalent; • Processor: Intel Core i7-8550U or equivalent; • Memory: 8GB 64 bit, DDR4 2400 MHz or equivalent; • eMMC: N/A; • SATA-SSD: 256 GB or equivalent; • Network: 1000Mbps Ethernet RJ-45 Port or equivalent; • USB: USB 3.0 Port (Type A) x 2, USB 3.0 Port (Micro-B) x 1 • I/O: UART Port 1; • Power: 5 - 60 W; • Power Supply: 15.2 - 27.0 V Power Port 2 Independent Power Supply; • Operating Temperature: -13 to 113 °F (-25 to 45 °C). • OSDK expansion module or equivalent As-assembled size: 200 x 120 x 40 mm. <p>Specifications of 1 128GB SATA-SSD onboard comp with OSDK expansion module or equivalent:</p> <p>1 set powerful onboard computer with OSDK expansion module or equivalent: NVIDIA Jetson TX2 processor; 8GB 128 bit, DDR4 1333 MHz memory; 128 GB SATA-SSD; 91 x 61 x 35mm; 230g; 1000Mbps Ethernet RJ-45 Port, Wi-Fi, Operating Frequency: 2.4 GHz, 5.8 GHz;3-25W; includes WiFi antenna, power distribution unit, hub, adapter, button I/O extension unit, assembly bracket set, cables, or equivalent:</p> <ul style="list-style-type: none"> • for AI, image processing, motion analysis, and object recognition; • Model: MF2G or equivalent; • Weight: Approx. 230 g; Dimensions: 91 x 61 x 35 mm or equivalent; • Processor: NVIDIA Jetson TX2 or equivalent; • Memory: 8GB 128 bit, DDR4 1333 MHz or equivalent; • eMMC: 32 GB (approx. 28 GB available) or equivalent; • SATA-SSD: 128 GB or equivalent; • Network: 1000Mbps Ethernet RJ-45 Port, Wi-Fi, Transmission Standard: IEEE, • 802.11a/b/g/n/ac, Max Transmission Speed: 866.7 Mbps, or equivalent • Operating Frequency: 2.4000 - 2.4835 GHz, 5.150 - 5.250 GHz*; 5.250 - 5.350 GHz* or equivalent, • *limited to indoor use. 								
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	<ul style="list-style-type: none"> • EIRP: < 20 dBm (2.4000 - 2.4835 GHz), < 20 dBm (5.150 - 5.250 GHz), < 23 dBm (5.250 - 5.350 GHz) or equivalent; • USB: USB 3.0 Port (Type A) × 2, USB 3.0 Port (Micro-B) × 1; • I/O: CAN Port 2, UART Port 2, I2C Port 1, SPI Port 1; • Power: 3 - 25 W; Power Supply: 13.2 - 27.0 V Power Port 2 Independent Power Supply; • Operating Temperature: -13 to 113 °F (-25 to 45 °C). • OSDK expansion module or equivalent As-assembled size: 200 x 120 x 40 mm. <p>Specifications of 1 100x87mm module or equivalent: 1 high performance module: 100x87mm; 32 TOPS at 10W; GPU: NVIDIA Volta™ architecture w/ 512 NVIDIA CUDA cores & 64 Tensor cores; CPU: 8-Core Carmel ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3; Memory: 32 GB 256-bit LPDDR4x 136.5GB/s; Storage: 32 GB eMMC 5.1, or equivalent:</p> <ul style="list-style-type: none"> • GPU: NVIDIA Volta™ architecture with 512, NVIDIA CUDA cores and 64 Tensor cores, 22 TOPS (INT8) or equivalent; • CPU: 8-Core Carmel ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3 or equivalent; • Memory: 32 GB 256-bit LPDDR4x 136.5GB/s or equivalent; • Storage: 32 GB eMMC 5.1 or equivalent; • Video Encoder: 4x 4K60 (H.265) 8x 4K30 (H.265) 16x 1080p60 (H.265) 32x 1080p30 (H.265) 30x1080p30 (H.264) or equivalent; • Video Decoder: 2x 8K30 (H.265) 6x 4K60 (H.265) 12x 4K30 (H.265) 26x 1080p60 (H.265) 52x 1080p30 (H.265) 30x 1080p30 (H.264) or equivalent; • Connectivity: Wi-Fi requires external chip or equivalent; • Display: 3 multi-mode DP 1.4/eDP 1.4/HDMI 2.0 No DSI support or equivalent; • Others: USB 2.0, UART, SPI, CAN, I2C, I2S, DMIC & DSPK, GPIOs or equivalent; • Mechanical: 100 x 87mm, 699 pin Molex Mirror Mezz Connector, Integrated Thermal Transfer Plate or equivalent; • UPHY: (8x) PCIe Gen4 / (8x) SLVS-EC, (3x) USB 3.1, Single Lane UFS or equivalent; • AI Perf: 32 TOPS or equivalent; • Power: 10W 15W 30W; • PCIe: 1 x8 + 1 x4 + 1 x2 + 2 x1 (PCIe Gen4, Root Port & Endpoint); • CSI Camera: Up to 6 cameras (36 via virtual channels) 16 lanes MIPI CSI-2 D-PHY 1.2 (up to 40Gbps) C-PHY 1.1 (up to 62Gbps); • DL Accelerator: 2x NVDLA Engines, 10 TOPS (INT8); • Vision Accelerator: 2x 7-Way VLIW Vision Processor; • Networking: 10/100/1000 BASE-T Ethernet. <p>Specifications of 1 32 TOPS developer kit or equivalent:</p>								
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	<p>1 set high performance AI computer developer kit w/ thermal solution, carrier board, AC power supply: 32 TOPS; GPU: 512-Core Volta GPU w/ Tensor Cores; CPU: 8-Core ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3; Memory: 32 GB 256-Bit LPDDR4x 137 GB/s; Storage: 32 GB eMMC 5.1, or equivalent:</p> <ul style="list-style-type: none"> • GPU: 512-Core Volta GPU with 64 Tensor Cores or equivalent; • CPU: 8-Core ARM v8.2 64-Bit CPU, 8 MB L2 + 4 MB L3 or equivalent; • Memory: 32 GB 256-Bit LPDDR4x 137 GB/s or equivalent; • Storage: 32 GB eMMC 5.1 or equivalent; • Video encoder: 4x 4K @ 60 (HEVC) 16x 1080p @ 60 (HEVC) 32x 1080p @ 30 (HEVC) or equivalent; • Video decoder: 2x 8K @ 30 (HEVC) 6x 4K @ 60 (HEVC) 26x 1080p @ 60 (HEVC) 72x 1080p @ 30 (HEVC) or equivalent; • Display HDMI 2.0 Type A, 2x DisplayPort via USB-C or equivalent; • USB: 2x USB-C 3.1 (supporting DisplayPort and USB PD), Micro-USB 2.0 (serial port interface only) or equivalent; • Others: M.2 Key M (NVMe), M.2 Key E (PCIe x1 + USB 2.0 + UART (for Wi-Fi/LTE) / I2S + DMIC + GPIOs), 40-pin header (UART, SPI, CAN, I2C, I2S, DMIC, GPIOs), MicroSD / UFS card slot, eSATAp (eSATA USB 3.0 Type-A), 10-pin audio header, 8-pin automation header (system power and related signals), 4-pin fan header; • Mechanical: 100 mm x 87 mm x 65mm 699-pin connector or equivalent; • AI Perf: 32 TOPS or equivalent; • Power: 10W 15W 30W (DC power jack); • PCIe: x16 connector with x8 PCIe Gen4 or x8 SLVS-EC; • CSI Camera: Up to 6 cameras (36 via virtual channels) 16 lanes MIPI CSI-2 8 lanes SLVS-EC D-PHY 1.2 (up to 40 Gbps) C-PHY 1.1 (up to 91 Gbps); • DL Accelerator: 2x NVDLA Engines; • Vision Accelerator: 7-Way VLIW Vision Processor; • Networking: 10/100/1000 BASE-T Ethernet (RJ45, Gigabit Ethernet); • M2 KEY M: NVMe. <p>Specifications of 1 70x45mm module or equivalent:</p> <p>1 small supercomputer module: 70x45mm; AI Perf: 21 TOPS at 15-20W; GPU: 384-core NVIDIA Volta™ GPU w/ 48 Tensor Cores; CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6MB L2 + 4MB L3; Memory: 8GB 128-bit LPDDR4x 59.7GB/s; Storage: 16 GB eMMC 5.1, or equivalent:</p> <ul style="list-style-type: none"> • GPU: 384-core NVIDIA Volta™ GPU with 48 Tensor Cores or equivalent; 								
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	<ul style="list-style-type: none"> • CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6MB L2 + 4MB L3 or equivalent; • Memory: 8 GB 128-bit LPDDR4x 59.7GB/s or equivalent; • Storage: 16 GB eMMC 5.1 or equivalent; • Video Encoder: 2x 4K60 4x 4K30 10x 1080p60 22x 1080p30 (H.265) 2x 4K60 4x 4K30 10x 1080p60 20x 108p30 (H.264) or equivalent; • Video Decoder: 2x 8K30 6x 4K60 12x 4K30 22x 1080p60 44x 1080p30 (H.265) 2x 4K60 6x 4K30 10x 1080p60 22x 1080p30 (H.264) or equivalent; • Display: 2 multi-mode DP 1.4/eDP 1.4/HDMI 2.0 or equivalent; • Mechanical: 69.6 mm x 45 mm 260-pin SO-DIMM connector or equivalent; • AI Perf: 21 TOPS or equivalent; • Power: 10W 15W 20W; • PCIe: 1 x1 (PCIe Gen3) + 1 x4 (PCIe Gen4), total 144 GT/s; • CSI Camera: Up to 6 cameras (24 via virtual channels) 12 lanes (3x4 or 6x2) MIPI CSI-2 D-PHY 1.2 (up to 30 Gbps); • DL Accelerator: 2x NVDLA Engines; • Vision Accelerator: 7-Way VLIW Vision Processor; • Networking: 10/100/1000 BASE-T Ethernet. <p>Specifications of 1 21 TOPS dev. kit w/ cloud-native support or equivalent:</p> <p>1 set supercomputer developer kit w/ cloud-native support; w/ heatsink, carrier board & AC power supply; GPU: NVIDIA Volta™ architecture w/ 384 NVIDIA® CUDA® cores & 48 Tensor cores; CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6 MB L2 + 4 MB L3; 21 TOPS; Memory: 8GB 128-bit LPDDR4x 59.7GB/s; Camera: 2x MIPI CSI-2 D-PHY lanes, or equivalent:</p> <ul style="list-style-type: none"> • GPU: 384-core NVIDIA Volta™ GPU with 48 Tensor Cores or equivalent; • CPU: 6-core NVIDIA Carmel ARM@v8.2 64-bit CPU 6 MB L2 + 4 MB L3 or equivalent; • Memory: 8 GB 128-bit LPDDR4x 59.7GB/s or equivalent; • Storage: microSD; • Video Encoder: 2x 4K60 4x 4K30 10x 1080p60 22x 1080p30 (H.265) 2x 4K60 4x 4K30 10x 1080p60 20x 108p30 (H.264) or equivalent; • Video Decoder: 2x 8K30 6x 4K60 12x 4K30 22x 1080p60 44x 1080p30 (H.265) 2x 4K60 6x 4K30 10x 1080p60 22x 1080p30 (H.264) or equivalent; • Connectivity: Gigabit Ethernet, M.2 Key E (WiFi/BT included), M.2 Key M (NVMe) or equivalent; • Camera: 2x MIPI CSI-2 D-PHY lanes; • Display: HDMI and DP; • Others: GPIOs, I2C, I2S, SPI, UART; • Mechanical: 103 mm x 90.5 mm x 34.66 mm or equivalent; 								
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	<ul style="list-style-type: none"> AI Perf: 21 TOPS or equivalent; DL Accelerator: 2x NVDLA Engines; Vision accelerator: 7-Way VLIW Vision Processor; 								
	LOT 22: FURNITURE & FIXTURES								
1	<p>1) L-Shaped Office Tables (7 Units) Details: 140cm x 140cm x 120cm; with: glass protection, lockable cabinet drawers, CPU holder</p> <p>2) Office Tables (2 Units) Details: 120cm x 60cm x 75cm; light gray; with: one key lock system, 3 drawers, laminated in particle board</p> <p>3) Stacking Chairs (10 Units) Details: black; fabric cover steel frame; stacking; with: big foam</p> <p>4) Conference Table (2 Units) Details: Durable that can hold heavy equipment; 300cm x 120cm x 76cm; Materials: MDF Board Laminate Steel Structure</p> <p>5) Large Rack (1 Unit) Details: 4-layer adjustable 200cm x 60cm x 200cm; 150kg per layer; color blue</p> <ul style="list-style-type: none"> Free Delivery 		1						
	LOT 23: FURNITURE & FIXTURES								
1	<p>1) High Back Chairs (7 Units) Details: 52cm x 55cm x 75cm; 52cm up & 45cm down; black; reclining; with: 47cm footrest leatherette upholstered</p> <p>2) Office Chairs (4 Units) Details: mesh upholstered; chrome base; black; with: arm, tilt& lock mechanism</p> <p>3) Executive Chair (1 Unit) Details: dark brown; high back; silver coated nylon base; with: arm, reclining mechanism</p> <p>4) Counter Table with 5 Chairs (1 Set) Details: dimensions L180 x W70 x H105cm; Metal frame bar with</p>		1						

	<p>wooden top; WITH high chairs</p> <p>5) Foldable 8-Seater Table (1 Unit) Details: 8 ft fold in half; plastic material; metal frame; dimensions 244 x 76 x 74; color: white</p> <p>6) Medium Lockable Office Cabinets (2 Units) Details: Two door office metal cabinet; swing door and lock; dimensions 120 x 90 x 40; light gray color • Free Delivery</p>								
	LOT 24: FURNITURE & FIXTURES								
1	<p>1) Large Office Sofa (1 Unit) Details: dimensions L33" x W91" x H67"; L-Type sofa; Leather upholstery; Color: black</p> <p>2) Medium Lockable Office Cabinets (2 Units) Details: Size 400W x 550D x 650H mm; Medium cabinet; five-wheel caster with divider; powder beige color</p> <p>3) Medium Lockable Office Cabinet (1 Unit) Details: Two pull-out steel door cabinet; 5 shelves; Dimensions: 900Wx 450D x 1802H mm</p> <p>4) Large Rack (1 Unit) Details: Four-shelf open steel rack</p> <ul style="list-style-type: none"> • 1 Year Warranty, Free Delivery 		1						
	LOT 25: UAV control / telemetry visualization devices (SMARTPHONE)								
1	SMARTPHONE (iOS) - Details: Onetime cash out payment for 24-month postpaid plan of one (1) unit iOS smartphone with 256 GB storage capacity and unlimited calls & texts		1						
	LOT 26: UAV control / telemetry visualization devices (TABLET)								

1	TABLET - 10.9-inch (diagonal)/64GB/iOS 14/Liquid Retina display/4K video recording at 24 fps, 30 fps, or 60 fps/A14 Bionic chip with 64-bit architecture, Neural Engine/Nano Sim; e-Sim/Touch ID; Three-axis gyro/USB-C Charger		1						
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Name: _____

Legal Capacity: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____