



## REQUEST FOR QUOTATION

Date: **June 29, 2018**  
RFQ No.: **RFQ-NMR-18-007**

\*Name of Company:

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\*Address:

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\*Business Permit No.:

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\*Tax Identification Number (TIN):

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\*PhilGEPs Registration Number:

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The Housing and Land Use Regulatory Board (HLURB), through its Bids and Awards Committee, intends to procure **LGU Marawi CLUP Field Mapping/Monitoring Equipment** to be supplied & delivered in **Cagayan de Oro City**.

The procurement will be undertaken in accordance with Section 52.1(b) of the Revised Implementing Rules and Regulations of Republic Act No. 9184.

As such, you are invited to submit your establishment's quotations/proposals duly signed by you or your duly authorized representative not later than **July 09, 2018**, at exactly **9:00AM** for the item(s) described below, subject to the Terms and Conditions provided at the dorsal portion of this request for quotation (RFQ). Copies of the following eligibility requirements are also required to be submitted along with your quotation/proposal:

1. Business Permit; and
2. Income Tax/Business Return.

Open quotations may be submitted, manually at HLURB-Northern Mindanao Regional Field Office (NMRFO), 3/F Dupoint Bldg., Velez-Akut Sts., Cagayan De Oro City, or through facsimile or email at the address and contact number indicated below.

For any clarification, you may contact **Mr. Marc Vincent B. Barao** of HLURB-NMRFO at Telephone No. **(088)856-5088** or **(088)22721466** or email address at [hlurbnmr@gmail.com](mailto:hlurbnmr@gmail.com).

**JUDY G. SUMABAT**  
Chairperson  
Bids & Awards Committee



**INSTRUCTIONS:**

1. Accomplish this RFQ correctly and accurately.
2. Do not alter the contents of this form in any way.
3. Failure to comply with the technical specifications required will disqualify your quotation.
4. Failure to follow these instructions will disqualify your entire quotation.

After having carefully read and accepted the Terms and Conditions, I/we submit our quotation/s for the item/s as follows:

Procurement Project		Total Approved Budget for the Contract (ABC)	
Procurement of LGU Marawi CLUP Field Mapping/Monitoring Equipment		PhP 888,000.00	
TECHNICAL SPECIFICATIONS			
Item Description	Unit	Qty	Approved Budget (Php)
<b>1. Tablet(s) for Drones</b> - Android Operating System - Bluetooth/Wifi/Cellular Connection - Snapdragon 820 Qualcomm APQ 8096 - 32GB Storage expandable up to 256GB - 4GB RAM - At least 6000mAH Battery Pack - At least 9.7” Touchscreen AMOLED display with Touch Pen - Main Camera: 13MP; Front Camera: 5MP	unit	6	<u>28,000.00 / unit</u> Total = 168,000.00
<b>2. Tablet(s) for Digital Mapping</b> - Bluetooth/Wifi/Cellular Connection - A10X Fusion chip (64-bit architecture) - 64GB Storage (ROM) - 4GB RAM - At least 6000mAh Battery Pack - 10.5” LED Backlit Multi-touch Display - 2224 x 1668 resolution at 264 ppi - Main Camer: 12MP with up to 5x Zoom - Home/Touch ID Sensor; Three Axis Gyro - 30.4-watt-hour rechargeable battery	unit	2	<u>45,000.00 / unit</u> Total = 90,000.00



<b>3. DSLR Camera</b> <ul style="list-style-type: none"><li>- DSLR 24megapixel Camera 18-55mm(F3.5-5.6)</li><li>- FL + Geotagging Capabiltlity</li><li>- 1920 x 1080 (Full HD)</li></ul>	unit	1	<u>30,000.00 / unit</u> Total = 30,000.00
<b>4. Drone</b> <ul style="list-style-type: none"><li>- With georeferencing &amp; stitching capabilities</li><li>- See attached additional sheets/pages for detailed technical specifications</li><li>- Complete Package (Unit, Remote, Charger, Battery Pack and Propellers)</li><li>- With Carrying Case, Extra battery pack and complete set of extra propellers</li></ul>	unit	3	<u>200,000.00 / unit</u> Total = 600,000.00

Please quote your best offer for the items above. ***The information stated above shall be the basis for the evaluation and calculation of your total quotation.***

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Signature over Printed Name

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Office Telephone No. / Mobile Telephone No.

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Email address/es



### **TERMS AND CONDITIONS**

1. Any modifications in the item(s) specifications during delivery of materials/equipment is strictly prohibited.
2. Bidders shall provide correct and accurate information required in this form.
3. All fields with asterisks (\*) are mandatory and must be filled up. Failure to provide information on mandatory fields will disqualify your quotation.
4. Price quotation(s) must be valid for a period of thirty (30) calendar days from the date of submission.
5. Price quotation(s), to be denominated in Philippine peso shall include all taxes, duties, and/or levies payable.
6. Quotations exceeding the Approved Budget for the Contract shall be rejected.
7. Award of contract shall be made to the lowest quotation which complies with the technical specifications, and other terms and conditions stated herein.
8. Any interlineations, erasures, or overwriting shall be valid only if they are signed or initiated by you or any of your duly authorized representative(s).
9. The **HLURB** shall have the right to inspect and/or to test the goods to confirm their conformity to the technical specifications.
10. Liquidated damages equivalent to one tenth of one percent (0.001%) of the value of the goods not delivered within the prescribed delivery period shall be imposed per day of delay. The **HLURB** shall rescind the contract once the cumulative amount of liquidated damages reached ten percent (10%) of the amount of the contract, without prejudice to other courses of action and remedies open to it.



## DRONE DETAILED TECHNICAL SPECIFICATIONS

### AIRCRAFT

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Takeoff Weight	1375 g (3.03 pounds), including battery & propellers
Diagonal Distance	350 mm (1 ft, 1.7 inches)
Max Ascent Speed	6 m/s (S - mode) 5 m/s (P - mode)
Max Descent Speed	4 m/s (S - mode) 3 m/s (P - mode)
Max Speed	72 kph (S - mode) 45 mph 58 kph (A - mode) 36 mph 50 kph (P - mode) 31 mph
Max Service Ceiling Above Sea Level	19,685 feet (6000 m)
Max Flight Time (no wind)	Approx. 30 minutes
Max Wind Speed Resistance	22.3 mph (10 m/s)
Max Tilt Angle	42° (S - mode) 35° (A - mode) 25° (P - mode)
Max Angular Speed	250°/s (S - mode) 150°/s (A - mode)
Operating Temperature Range	0° - 40°C (32° - 104°F)
Operating Frequency	2.400 - 2.483 GHz 5.725 - 5.850 GHz
GNSS	GPS + GLONASS
Hovering Accuracy Range	Vertical: ±0.1 m (with Vision Positioning) ±0.5 m (with GPS Positioning)  Horizontal:



±0.3 m (with Vision Positioning)  
 ±1.5 m (with GPS Positioning)

**VISION SYSTEM**

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Vision System	Forward Vision System Backward Vision System Downward Vision System
Velocity Range	≤31 mph (50 kph) at 6.6 feet (2m) above ground
Altitude Range	0-33 feet (0-10m)
Operating Range	0-33 feet (0-10m)
Obstacle Sensory Range	2-98 feet (0.7-30m)
FOV	Forward: 60° (Horizontal), ±27° (Vertical) Backward: 60° (Horizontal), ±27° (Vertical) Downward : 70° (Front and Rear) 50° (Left and Right)
Measuring Frequency	Forward: 10 Hz Backward: 10 Hz Downward: 20 Hz
Operating Environment	Surface with clear pattern and adequate lighting (lux > 15)
<b>REMOTE CONTROLLER</b>	
Operating Frequency	2.400 - 2.4835 GHz 5.725 - 5.850 GHz
Max Transmission Distance (unobstructed, free of interference)	2.400 - 2.483 GHz: FCC: 4.3 miles (7 km) CE: 2.5 miles (4 km) SRRC: 2.5 miles (4 km)  5.725 - 5.850 GHz: FCC: 4.3 miles (7 km) CE: 1.2 miles (2 km) SRRC: 3.1 miles (5 km)



Transmitter Power (EIRP)	2.400 - 2.483 GHz: FCC: 26 dBm CE: 20 dBm SRRC: 20 dBm 17 dBm	MIC:
	5.725 - 5.850 GHz: FCC: 26 dBm CE: 14 dBm SRRC: 20 dBm	MIC: -
Operating Temperature Range	0°C - 40°C (32° - 104°F)	
Battery	6000 mAh LiPo 2S	
Operating Current/Voltage	1.2A@7.4V	
Video Output Port	GL300K: HDMI GL300L: USB	
Mobile Device Holder	GL300K: Built-in display device (5.5 inch screen, 1920x1080, 1000 cd/m <sup>2</sup> , Android system, 4 GB RAM + 16 GB ROM) GL300L: Tablets and smartphones	

**CHARGER**

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Voltage	17.4 V
Rated Power	100 W
APP/LIVE VIEW	
Mobile App	DJI GO 4
Live View Working Frequency	2.4 GHz ISM, 5.8 GHz ISM
Live View Quality	720p@30fps, 1080P @ 30 fps
Latency (depending on environmental conditions and mobile device)	Phantom 4 Pro V2.0: 220 ms (depending on conditions and mobile device) Phantom 4 Pro +V.20: 160 - 180 ms
Required Operating System	iOS v9.0 or later Android v4.4 or later

**GIMBAL**



Stabilization	3-axis (pitch, roll, yaw)
Controllable Range	Pitch: -90° to +30°
Max Controllable Angular Speed	Pitch: 90°/s
Angular Vibration Range	±0.02°

**INFRARED SENSING SYSTEM**

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Obstacle Sensory Range	0.6-23 feet (0.2-7 m)
FOV	70° (Horizontal), ± 10° (Vertical)
Measuring Frequency	10 Hz
Operating Environment	Surface with diffuse reflection material, and reflectivity > 8% (such as wall, trees, humans, etc.)

**CAMERA**

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Sensor	1" CMOS Effective Pixels: 20 MP
Lens	FOV: 84°8.8 mm/24 mm (35 mm format equivalent) f/2.8-f/11 auto focus at 1 m - ∞
ISO Range	Video: 100 - 3200 (Auto) 100 - 6400 (Manual)  Photo: 100 - 3200 (Auto) 100 - 12800 (Manual)
Shutter Speed	Mechanical Shutter: 8-1/2000s      Electronic Shutter: 8 - 1/8000s
Still Image Size	3:2 Aspect Ratio: 5472x3648      4:3 Aspect Ratio: 4864x3648 16:9 Aspect Ratio: 5472x3078





PIV Image Size	4096x2160 (4096x2160 24/25/30/48/50p) 3840x2160 (3840x2160 24/25/30/48/50/60p) 2720x1530 (2720x1530 24/25/30/48/50/60p) 1920x1080 (1920x1080 24/25/30/48/50/60/120p) 1280x720 (1280x720 24/25/30/48/50/60/120p)
Still Photography Modes	Single Shot Burst Shooting: 3/5/7/6/10/14 frames Auto Exposure Bracketing (AEB): 3/5 bracketed frames at 0.7 EV Bias Interval: 2/3/5/7/10/15/20/30/60s
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)
Photo	JPEG, DNG (RAW), JPEG + DNG
Video	MP4/MOV (AVC/H.264; HEVC/H.265)



Supported SD Cards	Micro SD	Max
	Capacity: 128 GB	Write
	Speed $\geq$ 15MB/s, Class 10 or UHS-1 rating required	
Operating Temperature Range	32° to 104°F (0° to 40°C)	

#### **INTELLIGENT FLIGHT BATTERY**

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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