

DEPARTMENT OF ENERGY

Energy Center, Rizal Drive, Bonifacio Global City, Taguig City

QTY	ARTICLE	UNIT COST	APPROVED BUDGET FOR THE CONTRACT	BID PRICE
1	Drone	Php80,000.00	Php 80,000.00	

TERMS OF REFERENCE

I. TECHNICAL SPECIFICATIONS

Drone

Camera

Sensor : Effective Pixels: 12 million
Lens : FOV: about 83° (24 mm); about 48° (48 mm) , 35 mm Format
Equivalent: 24-48, Aperture: f/2.8 (24 mm)–f/3.8 (48 mm)
Shooting Range: 0.5 m to ∞

ISO Range : Video: 100-3200
Photo: 100-1600 (auto) 100-3200 (manual)
Shutter Speed : Electronic Shutter: 8–1/8000s
Still Image Size : 4000×3000
Photography Modes: Single shot, Burst shooting: 3/5/7 frames,
Auto Exposure Bracketing (AEB): 3/5 bracketed frames at
0.7EV Bias,
Interval (JPEG: 2/3/5/7/10/15/20/30/60s
RAW:5/7/10/15/20/30/60s)

Video Resolution: 4K: 3840×2160 24/25/30p
2.7K: 2688×1512 24/25/30/48/50/60p
FHD: 1920×1080 24/25/30/48/50/60/120p

Max Video Bitrate: 100Mbps
Color Mode D-Cinelike
Supported File System FAT32 (≤ 32 GB) exFAT (> 32 GB)
Photo Format JPEG / DNG (RAW)
Video Format MP4 / MOV (MPEG-4 AVC/H.264, HEVC/H.265)

GIMBAL

Mechanical Range Tilt: -135–45° Pan: -100–100°
Controllable Range Tilt: -90–30° Pan: -75–75°
Stabilization 3-axis (tilt, roll, pan)

Max Control Speed (tilt) 120° /s
Angular Vibration Range ±0.005°

Aircraft

Takeoff Weight Up to 905g
Dimensions Folded: Atleast 214×91×84 mm (length×width×height)
Unfolded: Atleast 322×242×84 mm (length×width×height)
Diagonal Distance Up to 354 mm
Max Ascent Speed 5 m/s (S-mode) , 4 m/s (P-mode)
Max Descent Speed 3 m/s (S-mode), 3 m/s (P-mode)
Max Speed (near sea level, no wind) 72 kph (S-mode)
Maximum Takeoff Altitude 6000 m
Max Flight Time (no wind) 31 minutes (at a consistent 25 kph)
Max Hovering Time (no wind) 29 minutes
Max Flight Distance (no wind) 18 km (at a consistent 50 kph)
Max Wind Speed Resistance 29–38 kph
Max Tilt Angle 35° (S-mode, with remote controller) 25° (P-mode)
Max Angular Velocity 200°/s
Operating Temperature Range - 10°C to 40°C
Operating Frequency 2.400 - 2.483 GHz, 5.725 - 5.850 GHz
Transmission Power (EIRP) 2.400 - 2.483 GHz, FCC: ≤26 dBm, CE: ≤20 dBm,
SRRC: ≤20 dBm,
MIC: ≤20 dBm, 5.725-5.850 GHz, FCC: ≤26 dBm, CE
: ≤14 dBm
SRRC: ≤26 dBm

GNSS

GPS+GLONASS
Hovering Accuracy Range Vertical: ± 0.1 m (when vision positioning is active),
± 0.5 m (with GPS positioning)
Horizontal: ± 0.3 m (when vision positioning is active) ,
± 1.5 m (with GPS positioning)

Internal Storage 8 GB

Remote Controller

Operating Frequency 2.400 - 2.483 GHz; 5.725 - 5.850 GHz
Max Transmission Distance 2.400 - 2.483 GHz; 5.725 - 5.850 GHz
FCC: 10000 m
CE: 6000 m
SRRC: 6000 m, MIC: 6000 m
Operating Temperature Range 0°C - 40°C
Transmission Power (EIRP) 2.400 - 2.483 GHz\
FCC: ≤26 dBm
CE: ≤20 dBm
SRRC: ≤20 dBm
MIC: ≤20 dBm

	5.725-5.850 GHz
	FCC: ≤26 dBm, CE: ≤14 dBm, SRRC: ≤26 dBm
Battery	3950 mAh
Operating Current/Voltage	1800 mA = 3.83 V
Supported Mobile Device Size	Max length: 160 mm; max thickness: 6.5–8.5 mm
Supported USB Port Types	Lightning, Micro USB (Type-B), USB-C
Intelligent Flight Battery	
Capacity	3850 mAh
Voltage	15.4 V
Max Charging Voltage	17.6 V
Battery Type	LiPo 4S
Energy	59.29 Wh
Net Weight	297 g
Charging Temperature Range	5°C to 40°C
Max Charging Power	80 W
Charger	
Input	100-240 V, 50/60 Hz, 1.8A
Output	Main: 17.6 V = 3.41 A or 17.0 V = 3.53 A USB: 5 V=2 A
Voltage	17.6 ± 0.1 V
Rated Power	60 W
Supported SD Cards	
Supported SD Cards	MicroSD with capacity of up to 128 GB. A UHS-I, microSD card is required.
Speed Grade 3	128GB or higher
Recommended microSD Cards	

TERMS AND CONDITIONS:

1. Prices quoted in Philippine Peso should be firm and irrevocable and not subject to charge whatsoever, even due to increase in cost of raw material components or fluctuation in foreign exchange rates and taxes and duties. Should the equipment model be rendered obsolete or phased out by the manufacturer, the upgraded version shall be delivered at no added cost to DOE.
2. Equipment warranty must be (1) one year on parts and services. The unit is to be guaranteed for trouble free performance for minimum of (1) one year after the installation/ delivery/ Supplier should warrant that all components shall be new of the first quality according to specifications and shall be free from defects. The defects if any, during the guarantee period are to be rectified or replaced free of charged by arranging free replacement whenever necessary.
3. The technical bid should include manufacturer's name, address and relevant technical literature/brochure with warranty terms.
4. Bidder must include in its offer any items not specified in bid document but necessary to operate the equipment for intended use.
5. One hundred percent (100%) of purchase price will be released within thirty (30) days from issuance of certificate of acceptance by the end-user.

6. Supplier must also include in its bid information as to its capability to provide after sales service, including current employment of local qualified service engineers/technicians with experience and training relevant to the bid.
7. Bid price must be in the Philippine currency and must specify all costs attendant to the delivery of the equipment to EPIMB –REAMD such as freight, brokerage, duties and taxes related to the equipment purchase.
8. Delivery days must be within thirty (30) days upon receipt of the approved Purchase Order (PO) and must include instruction manual and other accessories needed for the operation of the said equipments, accessories and other tools.

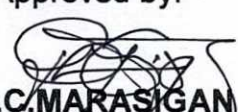
II. PAYMENT TERMS:

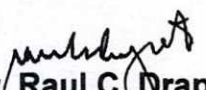
30 days upon submission to DOE accounting of the original PO, Invoice and Acceptance by the end-user.

Recommended by:


M.L.L. OLAP
OIC- REAMD

Approved by:


M.C. MARASIGAN
Director, OIC- EPIMB

Checked by: 
Engr. Raul C. Drapete
ISD – Chief - ITMS

Omnibus Sworn Statement (Revised)
[shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. *[Select one, delete the other:]*

[If a sole proprietorship:] I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

[If a partnership, corporation, cooperative, or joint venture:] I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. *[Select one, delete the other:]*

[If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical

Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative:] None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of ____, 20__ at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]
Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]