

**L I M I T E D T E N D E R
N O T I C E**

Tender Ref. No. GEN-29/9/2021-DSP_DIV-SMR-CHE-SMR CHE DEPTT-11236- Re-Tender
Date 24-08-2021
Tender Due Date 08-09-2021

To

Dear Sir,

The Purchase Officer, SAMEER-Centre for Electromagnetics invites sealed tender for the supply of materials / Services as per details given below:

| Sl. No | Description of Items | Qty(Nos.) |
|--------|--|-----------|
| 1. | Procurement of Mavic Mini Combo drone (Specification Attached) | 1 |

Terms and Conditions:

1. Tenders to be submitted to The Purchase Officer ,SAMEER-CEM ,CIT Campus,2nd Cross Road, Taramani, Chennai 600 113.
2. Delivery / Completion period should be clearly indicated.
3. Excise Duty, GST Percentage should be clearly indicated if admissible. Not eligible for FORM 'C' /'D'
4. WE ARE EXEMPTED FROM EXCISE DUTY
5. Quotation should be valid for atleast 60 days from the date of opening of the tender
6. Quotation should be sent in sealed envelope super scribing the tender reference number and tender due date.
E-mail quotation will not be accepted. YOUR OFFER WILL NOT BE CONSIDERED IF OUR TENDER REFERENCE NO. & TENDER DUE DATE IS NOT MENTIONED ON COVER.
7. Late tenders will not be accepted under any circumstances
8. We reserve the right to accept or reject any quotations fully or partly without assigning any reasons.
9. For Further Clarification Please Contact 044-22544061 / 22544020 Email: purchase.chn.sameer@nic.in
10. Unsolicited bids shall not be considered

V. Venkatesan

(V. Venkatesan)
Programme Director

Contd.,



CIT Campus, 2nd Cross Road, Taramani, Chennai - 600 113, India

सी.आई.टी.परीछर, दूसरा क्रॉस रोड, तारामणी चेन्नै - ६०० ११३.

दूरभाषी : Tel : +91-44-22541583 / 1817 / 2106 / 2452 फैक्स / Fax : 2254 1938 / 1424

वेबसाईट : www.sameer.org.in

Specification

| Aircraft | |
|-------------------------------------|--|
| Take off Weight | 249 g |
| Dimensions | Folded: 140×81×57 mm (L×W×H) Unfolded: 159×202×55 mm (L×W×H) Unfolded (with propellers): 245×289×55 mm (L×W×H) |
| Diagonal Distance | 213 mm |
| Max Ascent Speed | 4 m/s (S Mode) 2 m/s (P Mode) 1.5 m/s (C Mode) |
| Max Descent Speed | 3 m/s (S Mode) 1.8 m/s (P Mode) 1 m/s (C Mode) |
| Max Speed (near sea level, no wind) | 13 m/s (S Mode) 8 m/s (P Mode) 4 m/s (C Mode) |
| Maximum Take off Altitude | 3000 m |
| Max Flight Time | 30 minutes (measured while flying at 14 kph in windless conditions) |
| Max Wind Speed Resistance | 8 m/s (Scale 4) |
| Max Tilt Angle | 30° (S Mode) 20° (P Mode) 20° (C Mode) |
| Max Angular Velocity | 150°/s (S Mode) 130°/s (P Mode) 30°/s (C Mode) |
| Operating Temperature Range | 0° to 40°C (32° to 104°F) |
| Operating Frequency | Model MT1SS5: 5.725-5.850 GHz Model MT1SD25: 2.400- 2.4835 GHz, 5.725-5.850 GHz |
| Transmission Power (EIRP) | Model MT1SS5 5.8 GHz: <30 dBm (FCC); <28 dBm (SRRC) Model MT1SD25 2.4 GHz: <19 dBm (MIC/CE) 5.8 GHz: <14 dBm (CE) |
| 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) |
| Gimbal | |
| Mechanical Range | Tilt: -110° to 35° Roll: -35° to 35° Pan: -20° to 20° |
| Controllable Range | Tilt: -90° to 0° (default setting) -90° to +20° (extended) |
| Stabilization | 3-axis (tilt, roll, pan) |
| Max Control Speed (tilt) | 120°/s |
| Angular Vibration Range | ±0.01° |
| Sensing System | |
| Downward | Operating Range: 0.5-10 m |
| Operating Environment | Non-reflective, discernable surfaces Diffuse reflectivity (>20%) Adequate lighting (lux>15) |
| Camera | |
| Sensor | 1/2.3" CMOS Effective Pixels: 12 MP |
| Lens | FOV: 83° 35 mm Format Equivalent: 24 mm Aperture: f/2.8 Shooting Range: 1 m to ∞ |
| ISO Range | Video: 100-3200 (Auto) 100-3200 (Manual) Photo: 100-1600 (Auto) 100-3200 (Manual) |
| Shutter Speed | Electronic Shutter: 4-1/8000s |

| | |
|---|---|
| Still Image Size | 4:3: 4000×3000 16:9: 4000×2250 |
| Still Photography Modes | Single shot Interval: 2/3/5/7/10/15/20/30/60 s |
| Video Resolution | 2.7 K: 2720×1530 25/30 p FHD: 1920×1080 25/30/50/60 p |
| Max Video Bitrate | 40 Mbps |
| Supported File System | FAT32 (≤32 GB) exFAT (>32 GB) |
| Photo Format | JPEG |
| Video Format | MP4 (H.264/MPEG-4 AVC) |
| Remote Controller & Video Transmission | |
| Operating Frequency | Model MR1SS5: 5.725-5.850 GHz Model MR1SD25: 2.400-2.4835 GHz, 5.725-5.850 GHz |
| Max Transmission Distance (unobstructed, free of interference) | Model MR1SS5 5.8 GHz: 4000 m (FCC); 2500 m (SRRC) Model MR1SD25 2.4 GHz: 2000 m (MIC/CE) 5.8 GHz: 500 m (CE) |
| Operating Temperature Range | 0° to 40°C (32° to 104°F) |
| Transmission Power (EIRP) | Model MR1SS5 5.8 GHz: 5.8 GHz: <30 dBm (FCC); <28 dBm (SRRC) Model MR1SD25 2.4 GHz: <19 dBm (MIC/CE) 5.8 GHz: <14 dBm (CE) |
| Battery Capacity | 2600 mAh |
| Operating Current/Voltage | 1200 mA 3.6 V (Android) 450 mA 3.6 V (iOS) |
| 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 Type-C |
| Video Transmission System | Enhanced Wi-Fi |
| Live View Quality | 720p/30fps |
| Max. Bitrate | 4 Mbps |
| Latency (depending on environmental conditions and mobile device) | 170-240 ms |
| Charger | |
| Input | 100-240 V, 50/60 Hz, 0.5A |
| Output | 12V 1.5 A / 9V 2A / 5V 3A |
| Rated Power | 16 W |
| Intelligent Flight Battery | |
| Capacity | 2400 mAh |
| Voltage | 7.2 V |
| Max Charging Voltage | 8.4 V |
| Battery Type | Li-ion 2S |
| Energy | 17.28 Wh |
| Net Weight | 100 g |
| Charging Temperature Range | 5° to 40°C (41° to 104°F) |
| Max Charging Power | 24 W |
| Intelligent Flight Battery (1100 mAh) | |
| Capacity | 1100 mAh |
| Voltage | 7.6 V |
| Max Charging Voltage | 8.7 V |
| Battery Type | LiPo 2S |
| Energy | 8.36 Wh |
| Net Weight | 50 g |
| Charging Temperature Range | 5° to 40°C (41° to 104°F) |
| Max Charging Power | 18 W |
| APP | |
| Name | DJI Fly |
| Required Operating System | iOS v10.0 or later Android v6.0 or later |