

UAV Mate

High-Precision PPP/RTK Multifunctional GNSS Station for Drones

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|------------------------|-------------------------|------------------------|--------------------------|------------------------|-----------------------|
| 2 cm PPP RMS | 1792 CHANNELS | 20 Hz UPDATE | 10 hrs BATTERY | 827 g WEIGHT | IP68 RATING |
|------------------------|-------------------------|------------------------|--------------------------|------------------------|-----------------------|

GNSS PERFORMANCE

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|-------------------------|--|
| Constellations | GPS, GLONASS, BeiDou, Galileo, QZSS, SBAS |
| Channels | 1792 |
| PPP Accuracy | 2 cm RMS (convergence: 3 min) |
| RTK Accuracy (H / V) | 0.8 cm + 1 ppm / 1.5 cm + 1 ppm |
| Static Accuracy (H / V) | 2.5 mm + 0.5 ppm / 5 mm + 0.5 ppm |
| Update Rate | Up to 20 Hz |
| Time To First Fix | Cold <30s Warm <5s Re-acquisition <1s |
| Tilt Compensation | <=2 cm accuracy (within 60 deg), calibration-free, magnetic immune |

COMMUNICATION

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|-------------------|--|
| Cellular | 4G LTE / WCDMA / GSM — FDD B1/B3/B7/B8/B20/B28, TDD B38/B40 |
| Internal Radio | 410-470 MHz UHF, 0.5W/1.0W — TrimTalk, South, Satel, Transparent |
| Wi-Fi | 802.11 b/g/n (Hotspot mode supported) |
| Bluetooth | 4.1 |
| Wired Interface | USB Type-C (OTG supported) |
| Network Protocols | NTRIP Client/Server, TCP |

SYSTEM & DATA

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|---------------------|---------------------|
| Operating System | Linux |
| Internal Storage | 8 GB |
| Data Output | RINEX, NMEA-0183 |
| Differential Format | CMR, RTCM 2.x / 3.x |

ELECTRICAL

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|----------------|--|
| Battery | Built-in 7000 mAh / 7.4V lithium |
| Working Time | Up to 10 hours |
| Charging | Fast charge 15W max (5V 3A) — 3 hrs to 90% |
| External Power | USB 5-20V supported |

PHYSICAL & ENVIRONMENTAL

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|-----------------------|-------------------------------------|
| Dimensions | dia. 132 x 68 mm |
| Weight | approx. 827 g |
| GNSS Antenna | Integrated high-performance antenna |
| Operating Temperature | -40 C to +70 C |
| Storage Temperature | -55 C to +85 C |
| Ingress Protection | IP68 (dust-tight, waterproof) |
| Shock Resistance | 2 m pole drop onto concrete |
| Vibration | MIL-STD-810G, FIG 514.6C-1 |

WHAT'S IN THE BOX

Receiver Package

- UAV Mate GNSS Receiver
- Type-C USB Cable
- Metal Fixing Plate
- AC/DC Power Adapter
- Height Measure Accessory
- 450-470MHz Radio Whip Antenna

External Radio Package

- External Radio RS400H3
- High Gain Radio Antenna
- Telescopic Pole for Antenna
- Radio Power & Data Cables
- Tool Bag

uav-mate.com

sales@uav-mate.com | support@uav-mate.com