UAV Mate

High-Precision PPP/RTK Multifunctional GNSS Base Station

1.5 cm	1792	20 Hz	10 hrs	827 g	IP68
PPP H	CHANNELS	UPDATE	BATTERY	WEIGHT	RATING

GNSS PERFORMANCE

Constellations	GPS, GLONASS, BeiDou, Galileo, QZSS, SBAS
Channels	1792
PPP Accuracy (H / V)	1.5 cm / 3 cm (convergence: ~3 min, open sky)
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 (within 60°), calibration-free, magnetic immune

COMMUNICATION

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

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

ELECTRICAL

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

Dimensions	Ø132 × 68 mm
Weight	≈ 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
- 450–470 MHz 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