

UAV ANTENNA TRACKING UNIT

Ground tracking antenna maximizes radio communication range between the drone and ground control station, it allows to use of the maximum potential of the data link. Our tracking antenna system can be equipped with a directional high-gain antenna and Omni-directional backup data link to optionally keep track of the UAV. Also, we have a video camera, which allows having visual control over your drone close to mid-range distance. Our system fully supports Pixhawk-based drone and MAVLink protocol.

UAV antenna tracking unit including:

- Telescopic mast;
- Quadropod;
- Antenna tracker;
- Spare parts;
- Transport cases.



TECHNICAL SPECIFICATIONS:

Features and advantages:

- DATA Rates: > 10Mbps;
- Software Selectable: > 433 MHz, 900MHz, 2.4GHz & 5.8GHz;
- Simultaneous: IP and Serial Data transmission;
- Power outputs: 1W and 4W RF;
- AES Encryption: 128-bit ;
- High bandwidth connectivity to unmanned aircraft at distances: up to 100 km;
- Continuous rotation: 360°;
- Control Software Mavlink: Mission planner;

- IP65 Rating:
- Reliable signal strength and GPS aligned data-links
- Real time monitoring of signal and data quality.

Aluminum enclosure.

System Specifications:

- Frequency options: UHF, L-, S-, C-band;
- Position calibration: Visual positioning control;
- Serial Interface: RS-485;
- Ethernet: 100Base-T;
- Polarization: Dual polarized Vertical/ Horizontal polarization;
MIMO system;
- Environmental: IP54 rated;
- Set up time with tripod: 15 minutes / 2 person;
- Set up time with mast: 20 minutes / 3 person;
- Pointing Accuracy: <10.

Power Requirements:

- Input voltage: 24V;
- Input current: 4A.

Mechanical:

- Azimuth rotation: 360° continuous;
- Elevation rotation: -30°C +90°C;
- Height above ground:
 - ✓ with mast: 6 m;
 - ✓ with tripod: 2,5 m;
- Tracking head payload: 10 kg;
- Temperature: -25°C +45°C;
- Humidity: 5-95%;

Dimensions:

- Spread out telescopic mast with the antenna tracker installed: 3800x3800x5800 mm;
- Transports cases (from the bigger to the smaller):
 1. 1720x570x920 mm;
 2. 1720x570x500 mm;
 3. 1720x570x260 mm;
- Weight of the telescopic mast with installed antenna tracker: 200 kg;
- Weight with transport cases: 370 kg.

