UAV tracking antenna system

Tracking antenna maximizes radio communication range between the drone and ground control station, it allows to use the maximum potential of the data link.

Our tracking antenna system is equipped with a video camera, which allows having visual control over your UAV from close to mid-range distance. Our system fully supports Pixhawk-based drone and MAVLink protocol.



Features



UAV tracking antenna system

Significantly increases the quality and range of stable communication and provides a reliable HD video transmission.



Two communication channels

To ensure maximum reliability during the mission.



Built-in video camera

Allows you to have visual control over your drone from close to mid-range distance.



Video and telemetry datalink

Up to 200 km main datalink (C2 and video).



Backup telemetry datalink

Up to 150 km backup datalink (C2).



Ability to operate using built-in battery

More than 2 hours of autonomous work at full battery charge.



Automatic 5 m mast

To increase range and signal strength.



MESH technology support

Compatible UAV can be used to extend the communication range of a second drone.



Powered by Silvus Technologies

Silvus Technologies Streamcaster grants our tracking antenna system perfect efficiency and high signal strength.

Specifications

Advantages

• Data rates: >10 Mbps;

• Software selectable: > 433 MHz, 868 MHz, 900 MHz, 2.4 GHz & 5.8 GHz;

• IP and serial data transmission: simultaneous;

Power outputs:1 W and 4 W RF;

• AES encryption: 256-bit;

High bandwidth connectivity to

unmanned aircraft at distances: up to 200 km main datalink (C2 and video),

up to 150 km backup datalink (C2);

• Continuous rotation: 360 °;

• Control software MAVLink: mission planner USS;

Reliable signal strength and GPS

aligned data-links: +;

• Real-time monitoring of signal

and data quality:

System specifications:

• Frequency options: UHF, L-, S-, C-band;

Position calibration: visual positioning control;

• Serial interface: IP and serial data transmission;

• Ethernet: 100 Base-T;

• Polarization: dual polarized vertical/horizontal polarization;

+.

• Deployment time with quadropod: 15 minutes/2 person;

• Deployment time with mast: 20 minutes/3 person;

Pointing accuracy: <1 deg;

• Environmental resistance: radio channel antennas - IP65,

radio modem Silvus - IP67,

telemetry channel unit - IP65,

tracker control unit - IP54,

IP camera - IP65.

Specifications

Power Requirements

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

Mechanical

• Azimuth rotation: 360 °;

• Elevation rotation: -30 °C +75 °C;

Height above ground with mast: 5 m;

• Height above ground with quadropod: 2.5 m;

• Tracking head payload: <10 kg;

• Temperature: -20 °C +45 °C;

• Humidity: 5-95 %.

Dimensions and weight approximate

• Spread out telescopic mast with

assembled antenna tracker: 3800 x 3800 x 5800 mm;

• Spread out quadropod with

assembled antenna tracker: 2605 x 2605 x 2800 mm;

• Transports cases (from bigger

to smaller): 1. $1720 \times 570 \times 920 \text{ mm}$,

2. 1720 x 570 x 500 mm,

3. 1720 x 570 x 260 mm;

Weight of the telescopic mast

with installed antenna tracker: 178.2 kg;

• Weight of the quadropod with

installed antenna tracker: 31.4 kg;

• Weight with transport cases: 318 kg.

What's included



Antenna tracker

Controls the position of the antennas and ensures the maximum range of communication with the UAV.



Telescopic mast L 5000

Increases the communication range of the antenna tracker.



Quadropod M-100

Is used for short-distance flights, when there is no need for the telescopic mast.



Mission planner USS software

Required for the correct operation of the tracker.



Transportation cases

For safe and convenient transportation.



Spare parts and accessories

For fast deployment and flawless performance.





Want to know more?