



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.

220+ km and 130+ km
stable video and control link
configurations

Built-in video camera

256-bit AES encryption

MESH technology support

Automatic 5 m mast

Able of operating for 2 hrs
using the built-in battery



System configurations

Choose depending on what the mission requires:

220+ km configuration



220+

km range of stable communication and a reliable video transmission using a 5 m automatic mast.



130+

km using a quadropod.

130+ km configuration



130+

km of stable and secure C2 and Full HD video range using a 5 m automatic mast.



80+

km using a quadropod.

System

features and technologies

To fulfill all our customers' needs we provided the UAV tracking antenna system with a whole list of features, which may come in handy during various missions. It is equipped with a video camera, which allows having visual control over your UAV from close to mid-range distance.



AES-256 encryption

Grants safe and secure connection with the unmanned aircraft.



Video and telemetry datalink

220+ km (or 130+ km, depending on the configuration) main datalink (C2 and video).



Two communication channels

To ensure maximum reliability during the mission.



Backup telemetry datalink

220+ km (or 130+ km, depending on the configuration) backup datalink (C2).



Built-in video camera

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



Ability to operate using the 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.



Capable of operating in harsh temperature conditions

From -20 °C to +45 °C.

System

includes

The UAV tracking antenna system is a complete turnkey solution. Everything you may need for operation, transportation, or maintenance comes as a part of a package.

What you get:



Antenna tracker

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



Control software

Required for the correct operation of the tracker.



Transportation cases

For safe and secure transportation.



Spare parts and accessories

For fast deployment and flawless performance.

Versatility – is a key. Our system is available in two different modifications providing you with a maximum communication range of both main and backup datalinks, and making transportation and deployment simpler and more convenient.

Swap the configuration on the go:

Telescopic mast L 5000



Use the automatic telescopic mast for communication on maximum distances of 220+ km (or 130+ km, depending on the configuration).

Quadropod M-100

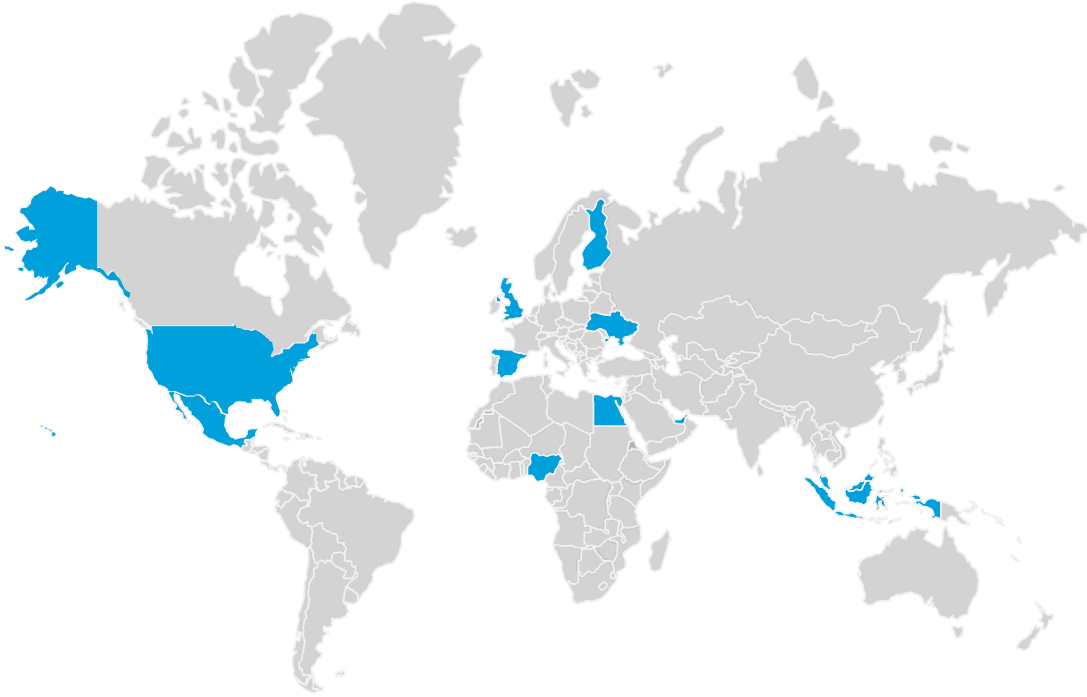


Use the quadropod for easier transportation if the mission doesn't require maximum communication range.

Operational

features

The UAV tracking antenna system is capable of operating in a wide geographic range in any environment under harsh weather conditions. We have successfully accomplished various missions across the globe.



Ready for any mission. Everywhere.



From -20 °C



To +40 °C

See how it works



**UKRSPEC
SYSTEMS**

— S m a r t s o l u t i o n s c o m p a n y

Technical

details

Communications:

Data rates	>10 Mbps
UDP/TCP and RTSP/RTP streaming	simultaneous
Power output	1 W and 4 W RF
Encryption	AES-128 (telemetry) / AES-256 (video)
Max. communication range (220+ km configuration)	220+ km main (C2 & video) and backup (C2) datalinks
Max. communication range (130+ km configuration)	130+ km main (C2 & video) and backup (C2) datalinks
Reliable signal strength and GPS aligned datalinks	+
Real-time monitoring of signal and data quality	+
Frequency options	UHF, L-, S-, C-band
Position calibration	visual positioning control
Frequency range selection	> 433 MHz, 868 MHz, 900 MHz, 2.4 GHz & 5.8 GHz
MAVLink control software	USS planner
Serial interface	RS-422
Ethernet	100Base-T

Environmental resistance:

Radio channel antennas	IP65
Radio modem Silvus StreamCaster	IP67
Telemetry channel unit	IP65
Tracker control unit	IP54
IP camera	IP65

Power Requirements:

Input voltage	24 V
Input current	3 A



Technical

details

Mechanical:

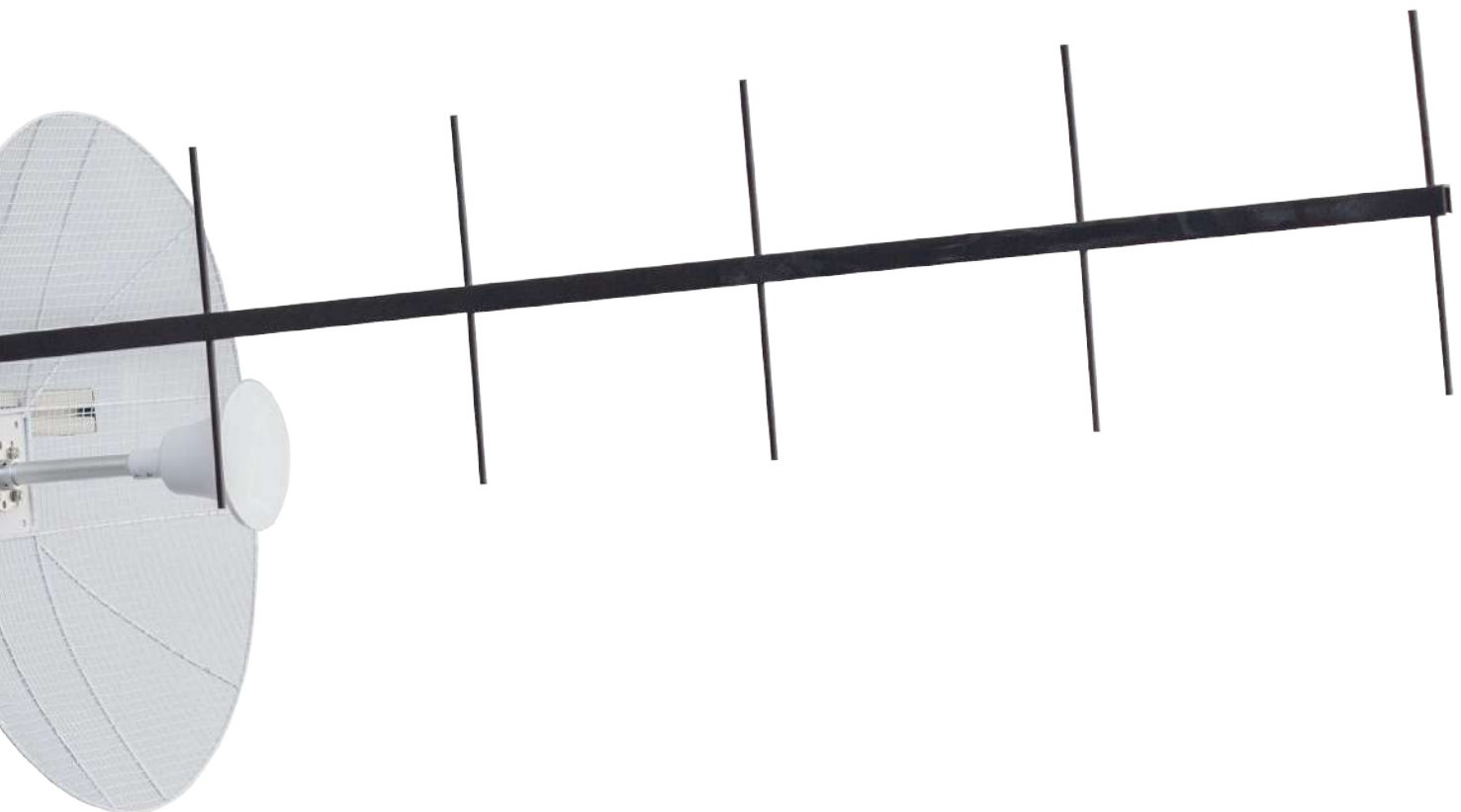
Azimuth rotation	360 °
Tilt angle.....	-40 ° +75 °
Pointing accuracy.....	< 1 deg
Height above ground with mast.....	5 m
Height above ground with quadropod	2.5 m
Tracking head payload.....	<10 kg
Temperature.....	-20 °C +45 °C
Humidity	5-75 %

Deployment:

Deployment time with quadropod	15 minutes/2 people
Deployment time with mast.....	20 minutes/3 people

Approximate dimensions and weight:

Spread out telescopic mast with an installed antenna tracker	3800 x 3800 x 5800 mm
Weight of the telescopic mast with an installed antenna tracker.....	178.2 kg
Spread out quadropod with an installed antenna tracker.....	2605 x 2605 x 2800 mm
Weight of the quadropod with an installed antenna tracker	31.4 kg
First transport case.....	1720 x 570 x 920 mm
Second transport case.....	1720 x 570 x 500 mm
Third transport case	1720 x 570 x 260 mm
Weight with transport cases.....	318 kg



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