



# 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.

200 km stable video and control link

Built-in video camera

256-bit AES encryption

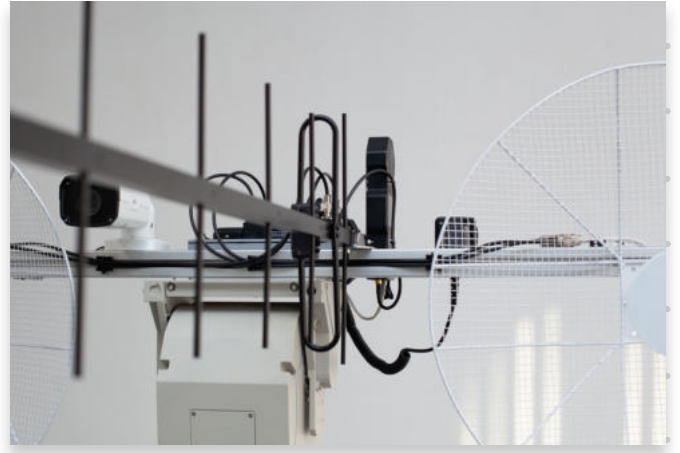
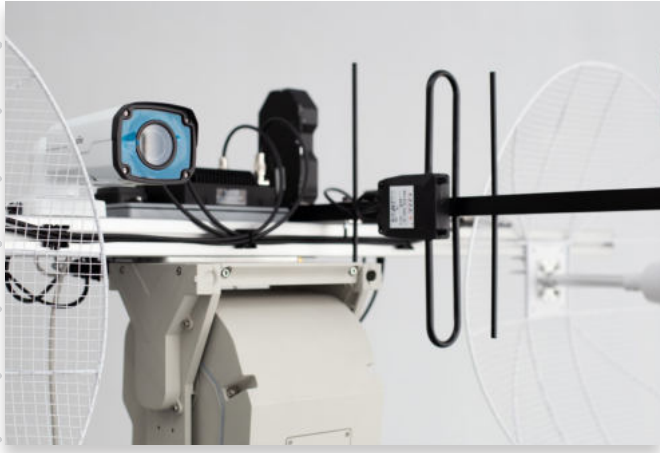
MESH technology support

Automatic 5 m mast

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



# Perfect component



# 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

200 km + main datalink (C2 and video).



### Two communication channels

To ensure maximum reliability during the mission.



### Backup telemetry datalink

200 km + 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 configurations 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



## 200+

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

#### Quadropod M-100



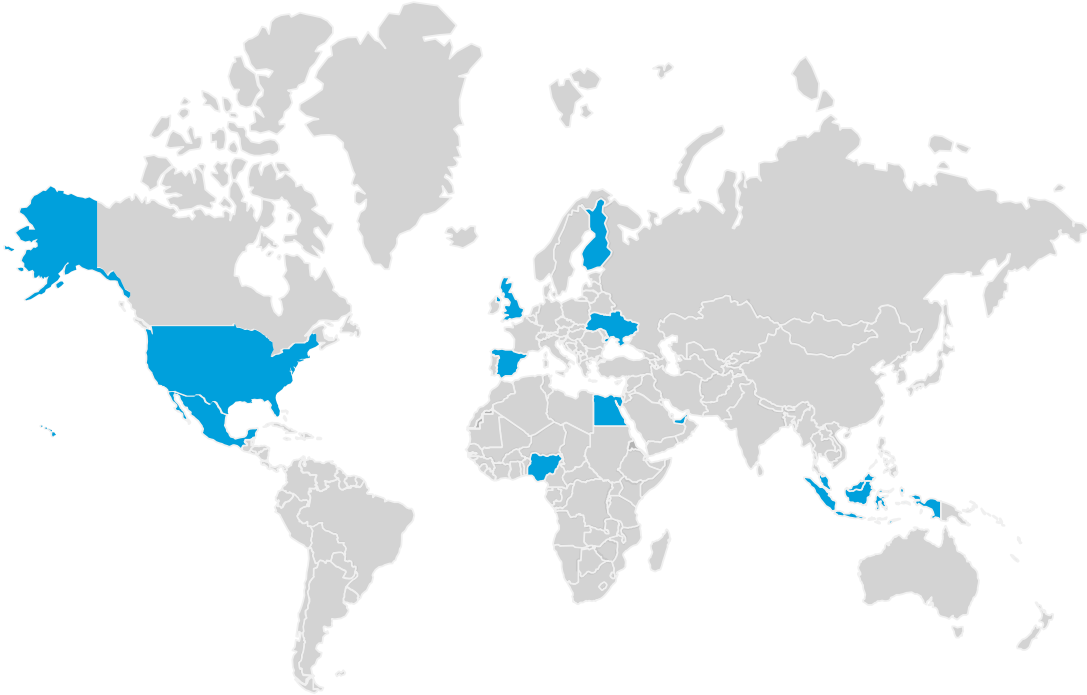
## 130+

km of C2 and video range using a quadropod for easier transportation if the mission doesn't require communication on maximum distances.

# 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**

Smart solutions company

# 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)
High bandwidth connectivity to aircraft at distances .....	200 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
Polarization .....	dual polarized vertical/horizontal polarization

### 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:

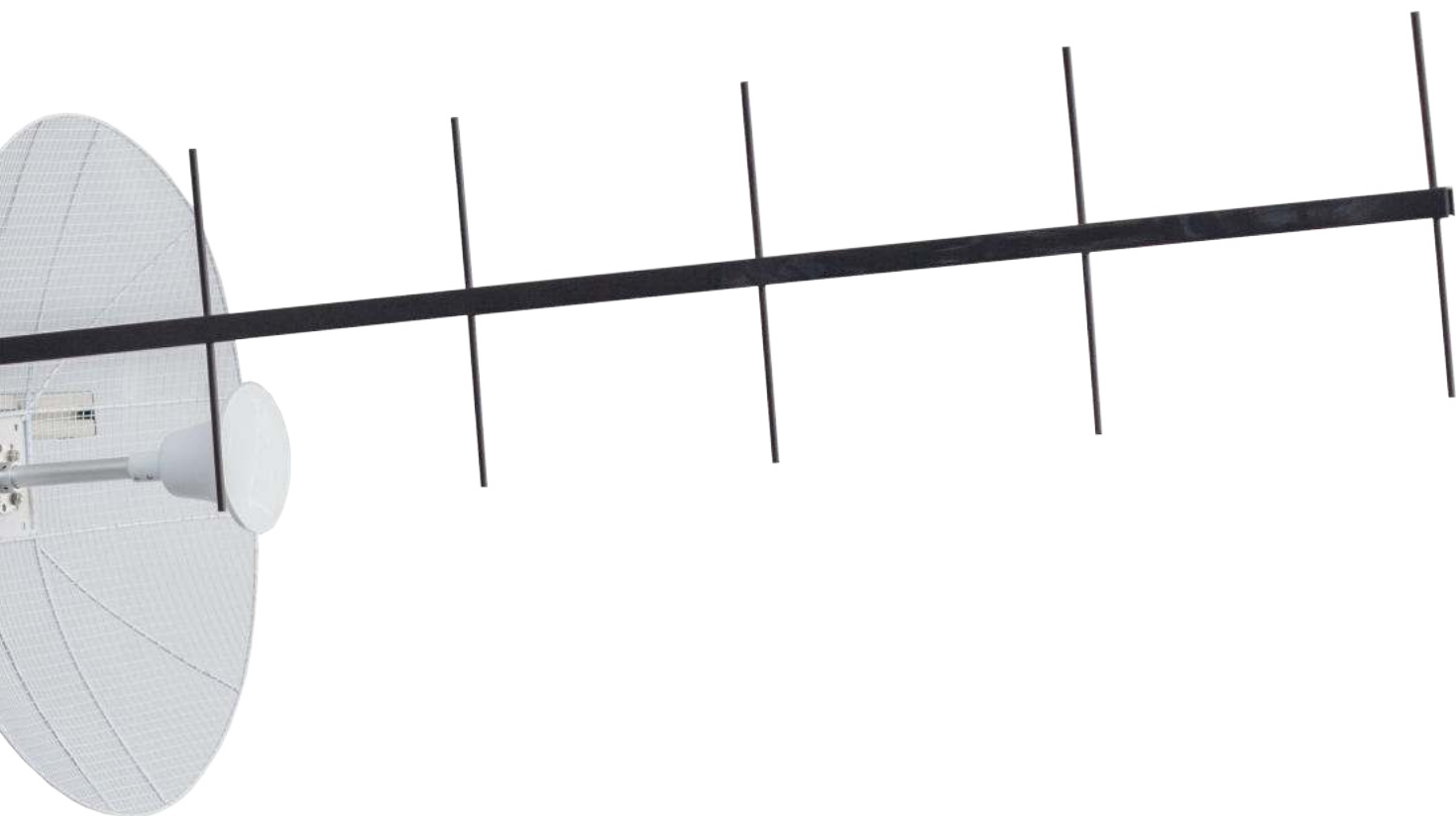
Azimuth rotation .....	360 °
Tilt angle.....	-40 ° +75 °
Pointing accuracy.....	< 1 deg
Height above ground with mast.....	5 m
Height above ground with quadropod .....	2.5 m
Tracking head payload.....	<10 kg
Temperature.....	-20 °C +45 °C
Humidity .....	5-75 %

### 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



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