

TRACKING PORTABLE ANTENNA

Datasheet V1.0



OCTOPUS

ISR SYSTEMS

A DIVISION OF
UAV FACTORY

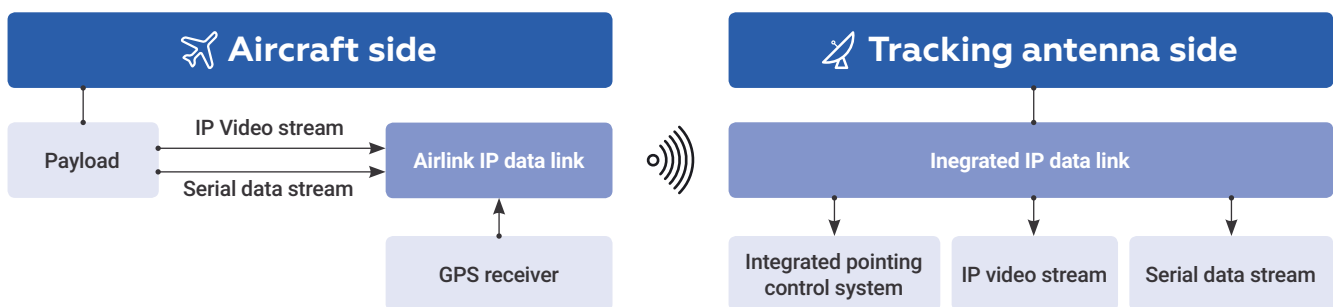


- Over 100 km range
- Manned and unmanned aircraft applications
- Integrated pointing algorithm
- Compatible with all autopilot systems, simple plug and play
- Automatic switching between directional and Omni antenna
- Simultaneous Ethernet and Serial Data
- Unlimited azimuth rotation
- Environmentally protected
- Heavy-duty positioner

PORTABLE TRACKING ANTENNA

The Tracking Antenna enables long range data transmission and is particularly suitable for unmanned and manned aircraft applications. Portable tracking antenna works with UAV Factory's digital Airlink IP datalink and can be used for video as well as command and control transmission with up to 12 Mbps data rate. Video transmission range of over 115 km has been successfully demonstrated.

Tracking antenna has an integrated pointing algorithm and will automatically point towards the aircraft. In close range the antenna is automatically switched from directional dish to an omnidirectional antenna. The tracking antenna is plug and play operational with any manned or unmanned aircraft. The GPS location of the aircraft is sent over the Airlink IP datalink and received directly by tracking antenna - this means that the tracking antenna is operational with any existing unmanned aircraft autopilot system. For manned aircraft an existing GPS receiver or dedicated GPS receiver can be used.



System specifications

| | |
|-------------------|--|
| Frequency options | 2.304-2.364 GHz or 2.405-2.470GHz or 5.000-5.800 GHz |
| Link Rate | Up to 12 Mbps |
| Encryption | 128 bit AES (Optional) |
| Sensitivity | 90dBm @ 12 Mbps -95dBm @ 6 Mbps |
| Channel Bandwidth | 4/8 MHz |
| Output power | 37 dBm (5 W) |
| Serial Interface | RS 232 |
| Ethernet | 10/100 BaseT, IEEE 802.3 |

Power Requirements

| | |
|---------------|--------------------------|
| Input voltage | 24 VDC |
| Input current | 6 A continuous 10 A peak |

Mechanical specifications

| | |
|-------------------------------|--------------------------|
| Azimuth rotation | 360° continuous |
| Elevation rotation | -13/+96 ° |
| Height above ground with mast | 2,8m |
| Tracking antenna head weight | 10kg |
| Guy-wire anchors | Three mounting locations |

Environmental

| | |
|-------------|------------------|
| Temperature | -20° C to +55° C |
| Humidity | Up to 95% |



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