

# Image Intelligence in Real-Time



For a minimal increase in size, weight and power the Mini S provides a substantial increase in gain, particularly in L and S bands versus Troll's SkyLink® Mini II.

Operationally, the Mini S has proven to provide exceptional long-range performance. It relies on a multi-axis, stabilized high-gain antenna that is continuously steered toward airborne or ground assets. This allows the Mini S to focus all its signal energy into narrow beams, increasing the received signal level while reducing the need for amplification. In addition, highly directional antennas also provide resistance to signal jamming and interference that often plague omnidirectional antennas.

Embedded Inertial Navigation System with GPS  
+30°/-90° Elevation Arc  
Dual Rotary Joint Optional

### Internal Inertial Navigation System (INS)

The Mini S incorporates an embedded INS for self-calibration and stand-alone position, attitude and heading data, independent of any external navigation equipment. This eliminates the need for an external GPS or magnetometer, significantly reducing the cost and complexity of installation and certification.

### Elevation Arc for Air or Ground Installation

A +30°/-90° elevation range allows the high-gain antenna in the Mini S to maintain a lock on its target. This capability enables the Mini S to track a full range of motion for installations on airborne vehicles.

### Field Tested

The SkyLink Mini S has been manufactured to standards Troll has adopted for all its airborne products. And while the Mini S has not undergone DO-160 testing its ruggedized gears and field tested design has proven itself in tough airborne and ground environments.

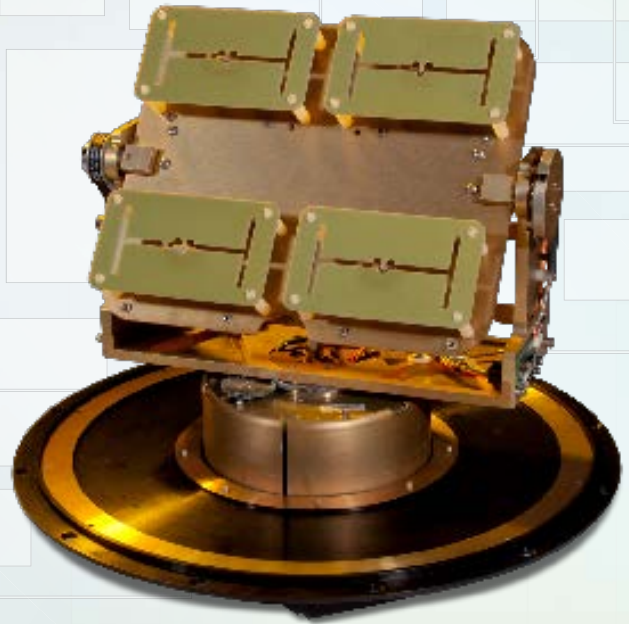
### Dual Rotary Joint Option

A dual rotary joint option allows the operation in two-frequency bands simultaneously or can be dual-polarized. This option supports Ethernet links with the latest MIMO (Multiple Input Multiple Output) technology or split-band FDD bidirectional data links.

Air-to-Ground Ethernet Connectivity

## SkyLink MINI S

Compact High-Gain Antenna System



Internal INS

Dual rotary joint

Dual-frequency or dual-polarization

Available in L to Ku band

Lightweight and easy to install

Automatic locating and tracking

Dovetail and omni-mount

Open-source ethernet control

# Compact High-Gain Antenna System Optimized for L and S Bands

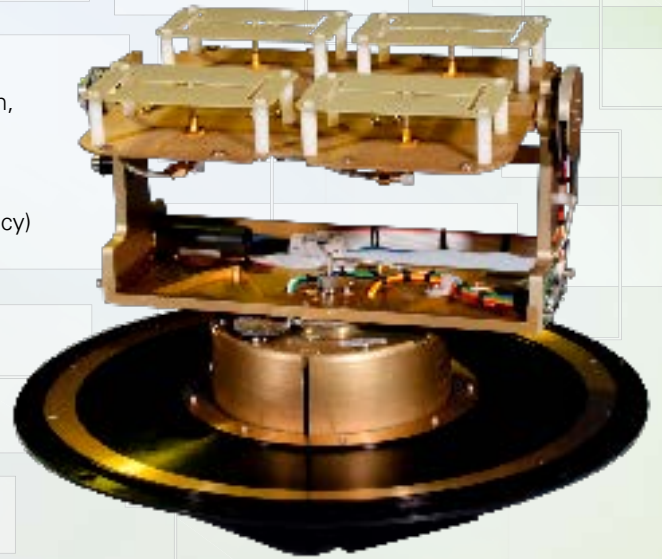
# MINI S

## SPECIFICATIONS

Specifications subject to change without

Connection:	N-Type (Transmitter), TNC (GPS)
Control:	Ethernet or RS-485/422/232
Power Input:	18- 32 VDC
Input Current:	1A nominal
Communication	Ethernet or Serial RS422
Output:	SkyLink LinkBox or MicroLink Cyclops application, or open Source protocol
Control Device:	Telemetry Serial sent to radio
Data:	Telemetry Serial sent to radio
Azimuth Steering:	Continuous rotation 100°/second (+/- 0.1° accuracy)
Elevation Steering:	+30°/-90°; Total 120° (+/- 0.1° accuracy)

Mechanical	
Dimensions:	13.2"H x 14"D
Weight:	11.6lbs



Antenna Characteristics	L Band	S Band	Lower C	Upper C	Ku Band
Type:	Slot	Slot	Horn	Horn	Horn
Mid-Band:	1.8 GHz	2.3 GHz	4.4 GHz	6.5 GHz	14 GHz
Beamwidth Az/EI (-3dB):	36° / 36°	32° / 32°	30° / 20°	30° / 18°	20° / 15°
Antenna Gain:	14 dBi	15 dBi	16 dBi	17 dBi	22 dBi
Polarization:	Vertical	Circ/Linear	Circ/Linear	Circ/Linear	Circ/Linear

Linear polarization can be horizontal or vertical. Circular polarization can be right or left hand polarized.  
Specifications subject to change without notice.



The Data Link Experts

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