

MANUFACTURED BY TROLL SYSTEMS  
THE DATA LINK EXPERTS

# SkyLink™ HD

## Airborne Antenna

SkyLink HD is a high performance two-axis steered antenna system designed for high-definition and other demanding transmission requirements. At the high bit rates required for HD transmission, multipath has a serious effect on signal performance. SkyLink HD's exclusive inertial measurement unit (IMU), heading sensor and two-axis steering not only point the antenna accurately to the receive sites' heading, but also compensate for the aircraft's pitch and roll. Additionally, SkyLink HD accounts for the altitude of the receive site so the system can maintain the correct elevation angle at all times. This feature dramatically reduces the ground reflection multipath that is caused when the aircraft banks.

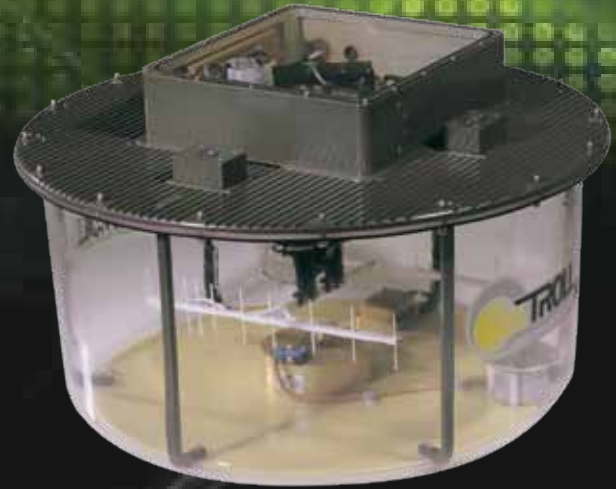
To complement the two-axis steering, SkyLink HD uses narrow vertical beam antennas optimized for the band used. In addition to the standard transmit antenna, the SkyLink HD supports a wide range of duplex receive modes as well as dual-band configurations. Frequencies available from 1.5 GHz to 15 GHz are common.

Installation is now easier than ever as well. The SkyLink HD only requires the C100 control head to build a complete transmission system. With the C100, control of all microwave equipment including antennas, radios and encoders is integrated into a single 5-inch, panel-mounted controller. Full support for third party radios is provided without the need for additional control heads.

The C100 moving map constantly updates the position of the aircraft while simultaneously displaying the location of remote receive sites giving the operator a clear indication of the optimal transmission path.

Digital and analog internal radios are available as options thereby simplifying the installation and reducing overall system weight and complexity.

The SkyLink HD supports a wide range of certified mounts for a variety of aircraft.



- ▶ **High-Definition Airborne Antenna Systems**
- ▶ **Azimuth and Elevation Steering**
- ▶ **3-Axis IMU Sensor**
- ▶ **High-Gain / Low Multipath Pattern**
- ▶ **Multi-Band Options**
- ▶ **Transmit and Receive Options**



[www.TROLLSYSTEMS.com](http://www.TROLLSYSTEMS.com)

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Available from L band to Ka band

# SkyLink™ HD Transmit and Receive

Steerable, High-Gain Airborne Antenna

## SKYLINK EQUIPMENT

SKYLINK HD SkyLink Antenna Pod  
C100 SkyLink Control System

## SKLINK ANTENNA POD

Size: 23" W x 23" L x 10.5" H  
Frontal Area: 253 square inches  
Weight: 27 lbs (excluding mounting bracket)  
Input Voltage: 18-32 VDC (supplied by C100 Controller)  
Input Current: 0.5 A nominal, 2.0 A max with external radios  
Azimuth Steering: Continuous rotation, 100 degrees / second  
Elevation Steering: +/- 22 degrees, 100 degrees / second  
Control: Full digital (RS-485) control interface utilizing AirTalk Protocol  
Airborne Characteristics: VNE > 200 knots - Drag @ 120 knots = 107 lbs

## ANTENNA

Type:	Steerable High-Gain	Omni	Downlook
Frequency Band:	Two-Element Yagi 1.9 to 2.5 GHz [inbands]	Omnidirectional 1.9 to 2.5 GHz	Cross Dipole 1.9 to 2.5 GHz
Beamwidth Az/EI (-3dB):	20°/30° nominal	360°/60° nominal	60° nominal
Antenna Gain:	16 dBi	2 dBi	8.5 dBi
Polarization:	Vertical	Vertical	Right Hand Circular

## OPTIONS

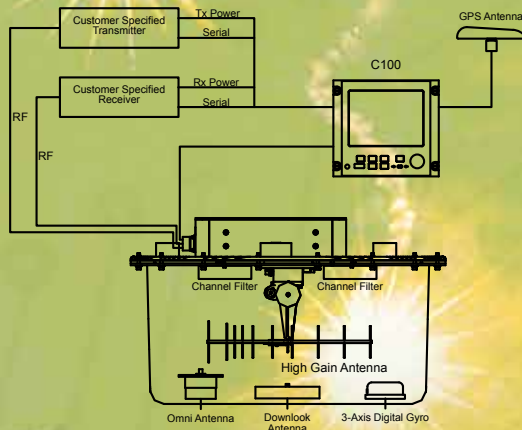
Additional Frequencies: Frequencies from 1.5GHz to 15GHz can be supported, refer to factory  
Duplex Configuration: Transmit or receive on any antenna. Internal filtering required.  
Multiband Configuration: Two-band high-gain configuration. 2.5/4.9, 2.5/6.4, 4.9/6.4, others as required.  
Aircraft Mounting: Specify aircraft model  
External IMU: Six-sensor inertial measurement unit. 0.1 degree resolution.

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See video imagery of  
this system.

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Specifications subject to change without notice.

## SKYLINK SYSTEM CONFIGURATION (typical)



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