SkyLink™ SP
Deployable Airborne Tracking Antenna

The SkyLink SP provides rotor-wing customers with the ability to deploy Troll’s popular Skylink Mini II below landing skids and payloads that could cause signal interference. Unlike omni antennas which radiate radio frequency in all directions the SkyLink SP emits its signal energy in a narrow < 30° cone-shaped pattern to improve range, throughput and data link reliability. The SkyLink SP’s embedded INS provides GPS and heading data enabling the antenna to automatically track receive antennas on the ground.

The SkyLink SP can mount to the skid crosstube aircraft step or via a Meeker Dovetail mount. It deploys the antenna below the landing skids, eliminating interference caused by the airframe, skids, and external payloads such as camera systems and searchlights. At less than 20 lbs. total weight and 22 lbs. drag @ 100 knots, the SkyLink SP is appropriate for all rotor-wing aircraft types.

Installation is quick and easy. The SkyLink SP simply requires Troll’s Network LinkBox and pilot panel for a complete unidirectional or bidirectional transmission system. The Network LinkBox controls all the microwave equipment including transmitters, receivers, encoders and decoders. Troll’s Network LinkBox also interfaces with onboard cameras, antennas and mapping systems.

- Ruggedized Construction
- Unique frangible safety link
- Easy to install and Operate
- Available in L Band to Ka Band
- Optional dual-polarization
- Optional bidirectional data

Network LinkBox
Pilot panel
Deployable Airborne Antennas

SkyLink™ SP  L Band to Ku Band
Directional Antenna Solution

SkyLink SP Physical Characteristics

Size Long Mast: 32.5” + antenna (standard)
Size Short Mast: 19.1” + antenna (optional)
SKYLINK SP: SkyLink Deployable Steerable Antenna
Network Link Box: SkyLink Control System

SKYLINK ANTENNA POD
Size: 4” W x 11” L x 4” H pod with motorized deployable arm
Frontal Area: 76 square inches
Weight: 15 lbs. (excluding mounting bracket)
Input Voltage: 18-32 VDC (supplied by C100 Controller)
Input Current: 0.5A nominal, 2.0A max with external radios
Azimuth Steering: Continuous rotation, 100°/second
Control: Full digital (RS-485) control interface utilizing AirTalk Protocol
Airborne Characteristics: VNE > 200 knots
Drag @ 120 knots = 22 lbs.

Antenna Characteristics

<table>
<thead>
<tr>
<th>Type</th>
<th>L Band</th>
<th>S Band</th>
<th>Lower C</th>
<th>Upper C</th>
<th>Ku Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Panel</td>
<td>Cavity</td>
<td>Horn</td>
<td>Horn</td>
<td>Horn</td>
</tr>
<tr>
<td>Mid-Band:</td>
<td>1.8 GHz</td>
<td>2.3 GHz</td>
<td>4.4 GHz</td>
<td>6.5 GHz</td>
<td>14 GHz</td>
</tr>
<tr>
<td>Beamwidth Az/El (-3dB):</td>
<td>71°</td>
<td>64°</td>
<td>46°</td>
<td>34°/28°</td>
<td>30°/26°</td>
</tr>
<tr>
<td>Antenna Gain:</td>
<td>10 dBi</td>
<td>10 dBi</td>
<td>13 dBi</td>
<td>15 dBi</td>
<td>18 dBi</td>
</tr>
<tr>
<td>Polarization:</td>
<td>Linear</td>
<td>Linear</td>
<td>Circ/Linear</td>
<td>Circ/Linear</td>
<td>Circ/Linear</td>
</tr>
</tbody>
</table>

Linear polarization can be horizontal or vertical. Circular polarization can be right or left hand polarized.
Specifications subject to change without notice. Contact the factory for other frequency options.