



Bi-Directional Data Link for Commercial & Industrial Drones & Robotics

SkyHopper PRO offers a bi-directional Data Link specifically designed for commercial and industrial drones, enabling operation of fleet management and autonomous UAV systems. By employing leading wireless technologies, the SkyHopper PRO delivers long range and Non-Line of Sight (N-LOS) communication that supports multiple transmission modes.

SkyHopper PRO supports Point-to-Point and Point-to-Multipoint communication, thereby enabling various modes of operation such as communication for multi-drone operations and drone communication to multiple ground units and viewers (receivers).

SkyHopper PRO Key Features:

- Bi-directional, configurable software defined radio (SDR) Data Link
- Up to 5km Line-of-Sight (LOS) range
- Broadcast, Multicast and Unicast transmission modes
- High-End Encryption & Security
- Control, & Telemetry
- Broadband link capable of delivering real-time full HD video
- Robust N-LOS operation
- Relay operation (Repeater)
- Compact and lightweight solution

The SkyHopper PRO also provides a full range of support services in an effort to optimize the use of the product, taking commercial and industrial drones to new heights. The SkyHopper PRO Support Team is available to answer questions or assist at any given time, to guarantee all product benefits are maximized.



Product Highlights:

- Long range Line of Sight Operation
- Superior communication through N-LOS & urban areas using proprietary radio technology that finds its way around obstructions to carry a clear and solid radio signal
- Relay system for extending LOS range and overcoming dead spots in urban or industrial areas
- Robust security and encryption with our advanced proprietary encryption mechanism
- Synchronized system enabling operation in multi-platform environment without degradation in throughput or performance
- Built-in flexibility to best optimize to specific customer challenges
- Universal solution with no integration needed for all IP payloads
- Compatible and integrated with a broad range of flight controllers, mission software and payloads.



Radio & Modem Specifications	
Range	Up to 5km / 3.1 miles per hop (LOS, uninterrupted conditions) For extended range, other solutions available
Throughput	Configurable from 1.6-6 Mbps For extended throughput, other solutions avail.
Network Topologies	Point-to-Point, Point-to-Multipoint, Relay (Repeater) Multiple Synchronized Point-to-Point Links
Modes of Operation	Broadcast, Multicast, Unicast Unlimited number of receivers/viewers
Sensitivity	Max -101dBm
Diversity Support	MIMO 2x2 , Tx & Rx Diversity
Transmission Technology	OFDM, TDD
Encryption	128 AES – Standard Package 256 AES and other options also available for purchase (custom export control may apply)
Frequencies	2.4 GHz (ISM) & 5.8 GHz (ISM) Other frequencies available upon request

For Integrated Video Processing, SkyHopper PRO V available.

Product versions available to accommodate FCC, CE & TELEC standards.

Environmental Temperature	
OEM Model:	-20 – 85° C (-4 – 185° F)
Casing (Basic) Model:	-20 – 45° C (-4 – 113° F)

Dimensions	(H x W x D) mm	(H x W x D) inch
OEM Model:	14 x 52 x 70	0.6 x 2.1 x 2.8
In Casing:	26 x 54 x 74	1.0 x 2.1 x 2.9

Weight	Grams	Ounces
OEM Model:	45	1.59
In Casing:	105	3.7

Power	
DC Voltage	7.4 – 24 V DC

Interfaces	
Telemetry & Control	Serial RS232
Ethernet	Full Ethernet Protocol 802.3 (TCP/IP, UDP, and others)
Antenna	MMCX (x2)

Configuration & Management	
Unit Monitoring	Web-Based Application
Program Interface	API