



Bi-Directional Data Link for Commercial Drones & Robotics

The SkyHopper PRO offers a bi-directional Data Link specifically designed for commercial drones, and provides the best solution for 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.

The 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 and configurable software defined radio (SDR) Data Link
- 5km+ Line-of-Sight (LOS) range
- Broadcast, Multicast and Unicast transmission modes
- Encrypted & secured
- Control, monitoring, telemetry and full HD real-time video
- Robust N-LOS operation
- Relay operation
- 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 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:

- Longest-range LOS performance in the market
- 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
- Unique simultaneous connectivity between multiple drones, controllers and viewers
- Built-in flexibility to best optimize to specific customer challenges
- Pure IP/Ethernet universal solution with no integration needed



Radio & Modem Specifications	
Distance	5km+ / 3.1miles+ (LOS, uninterrupted conditions)
Throughput	Configurable up to 6 Mbps
Network Topologies	Point-to-Point, Point-to-Multipoint & Relay Multiple synchronized Point-to-Point links
Modes of Operation	Broadcast, Multicast, Unicast
Sensitivity	Max – 101dBm
Diversity Support	Tx & Rx Diversity, MIMO 2x2
Transmission Technology	OFDM, TDD
FEC	Turbo Code
Encryption	128 AES
Frequencies	2.4 GHz (ISM) 900 MHz (ISM) – optional 5.8 GHz (ISM) – optional
Synchronization	1 pps sync input

Integrated Options*	
Video Encoder / Decoder	H.264 very low latency HD/SD Video Formats up to: 1920x1080p
Video Inputs / Outputs	Micro HDMI (input/output) Analog (Input)
Audio Inputs / Outputs	Embedded Audio over HDMI, Analog

Temperature Range	
Operating Temperature	-10 - 40° C (14 - 104° F)

Dimensions	[H x W x D] mm	[H x W x D] inch
	26 x 54 x 74	1.0 x 2.1 x 2.9

Weight	Gram	Ounce
	105	3.7

Power	
DC Voltage	7-14.5V DC

Interfaces	
Data	Ethernet, RS232 , USB (optional)
Full Ethernet Protocol Transparency	IP, TCP, UDP, RTP, HTTP
Antenna Connector	MMCX (x2)
Power Connector	4-pins

Configuration & Management	
Unit Monitoring Application	Web-Based Application
Program Interface	API, Code Lib. (Optional)

*Options at an additional cost.

This is a preliminary version of the product for early adaptors; specifications are subject to change.

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