# SKYHOPPERPRO

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



The SkyHopper PRO offers a bi-directional Data Link specifically designed for commercial and industrial 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 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:

- Tremendous Line-of-Sight performance with a robust link

- 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

# SKY HOPPER**PRO**

## Radio & Modem Specifications

| | |
|---|---|
| Distance | 5km+ / 3.1 miles+ (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 |

*Options at an additional cost.

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

## Temperature Range

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

## Dimensions

| 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

| 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) |

Contact us at: info@skyhopper.biz