SKY HOPPER**PRO**

NDAA Compliant **AUVSI+ Trusted® CYBER** **BLUE UAS** **GEN2**

SkyHopper PRO offers a cybersecure bi-directional data link that employs leading wireless technologies. The SkyHopper PRO delivers Non-Line of Sight (N-LOS) communication that supports Point-to-Point, Point-to-Multipoint, and Mesh.

SkyHopper PRO offers the Immunity, Cybersecurity and Encryption (ICE) suite—a multi-faceted and multi-layered software that protects the platform, safeguards communication channels, and encrypts the data that is transmitted and collected. The software can detect, prevent, and respond to multiple cyber-attacks in real-time without requiring intervention by an operator.

As a Blue UAS-approved solution, SkyHopper PRO meets stringent cybersecurity and supply chain requirements, offering U.S. defense and federal agencies a trusted, field-proven system aligned with NDAA compliance and operational standards.

Key Features:

- Cybersecure bi-directional, configurable software defined radio (SDR) Data Link
- Up to 5km Line-of-Sight (LOS) range
- Robust N-LOS & Urban operation
- Broadcast, Multicast and Unicast transmission modes
- Control & Telemetry
- Relay operation (Repeater)
- Compact and lightweight solution available as standalone, embedded and OEM versions

PRO   PRO Lite   PRO Micro

Product Highlights:

- ICE Cybersecurity Suite
- Blue UAS and NDAA Compliant
- Relay system for extended LOS range and overcoming dead spots in urban and industrial areas
- Operation in multi-platform environments without degradation in throughput or performance
- MIMO
- Built-in spectrum analyzer
- No integration needed for all IP payloads
- Compatible with a broad range of controllers, mission software, and payloads

Radio & Modem Specifications

Range	Up to 5km / 3.1 miles per hop (LOS, uninterrupted conditions)
Throughput	Configurable from 0.95-6.4 Mbps For extended throughput, other solutions available
Network Topologies	Point-to-Point, Point-to-Multipoint, Mesh, Relay (Repeater), unlimited viewers
	Multiple Synchronized Point-to-Point Links
Modes of Operation	Broadcast, Multicast, Unicast
Sensitivity	Max -101dBm
Diversity Support	MIMO 2x2, Tx & Rx Diversity
Transmission Technology	OFDM, TDD
Encryption	128 AES – Standard Package 256 AES - Optional
Frequencies	PRO & PRO Lite: 2.3 GHz-2.7 GHz and 4.9-5.9 GHz PRO Micro: 2.3-2.7 GHz Other frequencies available upon request

Temperature	Celsius	Fahrenheit
Environmental Temperature	-20 – 45° C	-4 – 113° F

Dimensions	mm (H x W x D)	in (H x W x D)
PRO	26 x 54 x 74	1.0 x 2.1 x 2.9
PRO Lite	19 x 54 x74	0.8 x 2.2 x 2.9
PRO Micro	13.6 x 43 x 60	0.53 x 1.7 x 2.36

Weight	Grams	Ounces
PRO	119	4.2
PRO Lite	99	3.49
PRO Micro	62	2.16

Power	
DC Voltage	PRO & PRO Lite: 7.4-24 V DC PRO Micro: 6–20 V DC
Power Consumption	Up to 13 Watt (peak on start) 12 W Average
Output Power	Up to 1 Watt (Peak Per Antenna) 0.2 Watt Average, 23dBm per Antenna

ICE Cybersecurity Suite

Cyber Level	• Primary (Standard) • Professional (Optional License)
Multi Facet / Multi-Tier	• Prevention of cyber-attacks against CPU's Operating System Integrity and embedded software protection • Interference Avoidance System (IAS) - real-time interference detection, cognitive radio sensing and avoidance • Prevent man in the middle attack • Prevent eavesdropping • Real-time protection against RF link jamming, enables adjacent network operation • Transmission Security (TranSec) - interception resistance • Unique key link identification • Multi-layer data protection, performs cryptographic operations for collected and transmitted data • Safeguard against cloud server attacks

Interfaces	
Telemetry & Control	Serial RS232
Additional Interfaces	Optional RS485/422, 1pps input/output, GPIO
Ethernet	Ethernet 10/100Mbps Full Ethernet Protocol Transparency (IP, TCP, UDP, RTP, HTTP, VLAN, VPN)
Antenna interface	MMCX (x2)

Configuration & Management	
Unit Monitoring	Web-GUI
Program Interface	API

Product versions available to accommodate FCC, CE & TELEC standards

Contact us at: sales@mobilicom.com