

## **Solution Overview**





S-MESH-MAP is a lightweight device designed to be fitted to a vehicle, building or Drone/ UAS. It combines mesh and Wi-Fi technologies to enable users to connect smart devices, sensors and cameras in environments that defeat radio and cellular communications.

- Simple to use
- Lightweight and small form factor; IP66, can be installed in a vehicle, building or Drone/UAS
- Quickly forms a true IP network for high bandwidth, bi-directional data flow
- High Data rate up to 56Mbps in MIMO mode
- Has a range of up to 18 miles (30 km) between nodes (frequency and bandwidth dependent)
- Advanced COFDM waveform for mesh
- Connects with Wi-Fi capable devices

## **Technical Specifications**

## S-MESH-MAP

**Specifications** 

Waveform COFDM - Token Passing Algorithm; SSBM User Selectable

Output Frequency 1000-1500MHz; 2000-2500MHz; 4500-5000MHz (other frequencies available)

Carrier Bandwidth 0.3/2.5 / 5.0 / 10.0 MHz (User Defined)

Data Rate Up to 56 Mbps (with optional MIMO Licence); 28Mbps standard

Transmit Power 500 mW

Receive Sensitivity <-100 dBm

Image Quality

Supports CIF / HD1 / D1 / 720P / 1080P

Power Supply

Externally Powered, 10-32V DC input

Power Consumption 4.6 W (Max)

GPS External Antenna (SMA)
Wi-Fi External Antenna (SMA)

**Device Interfaces** 

Antenna External Antenna (SMA) supplied with magnetic mounted, 6dBi OMNI Ethernet &

Control

Audio IP/Adaptive Multi-Rate (AMR) 4.8kbps

Networking

Ethernet 2 x 10/100 Mbps
Wi-Fi 2.4/5.0 GHz

Streaming

Protocol UDP, RTSP, RTP

Security

Encryption AES 128/256 (optional); DES 56-bit supplied as standard

Physical

Dimensions 5.5 x 3.7 x 1.8 inches (140 x 95 x 45 mm)

Weight 15 ounces (450 g)

Operating Temperature -22°F to 131°F (-30°C to 55°C) IP66

License Options AES

STDM (Hop Mode)

FHSS (Frequency Hopping Spread Spectrum)

Interference Avoidance (SMART Mode)

MIMO

Large Network

SSBM (Single Sideband Modulation)

Reliable connectivity by extending coverage to the edge of current networks – and beyond

