

The background features a complex network of glowing blue and white nodes connected by thin lines, creating a mesh-like structure. A bright, glowing orange and red sphere is positioned in the upper right quadrant, emitting a strong light that illuminates the surrounding network.

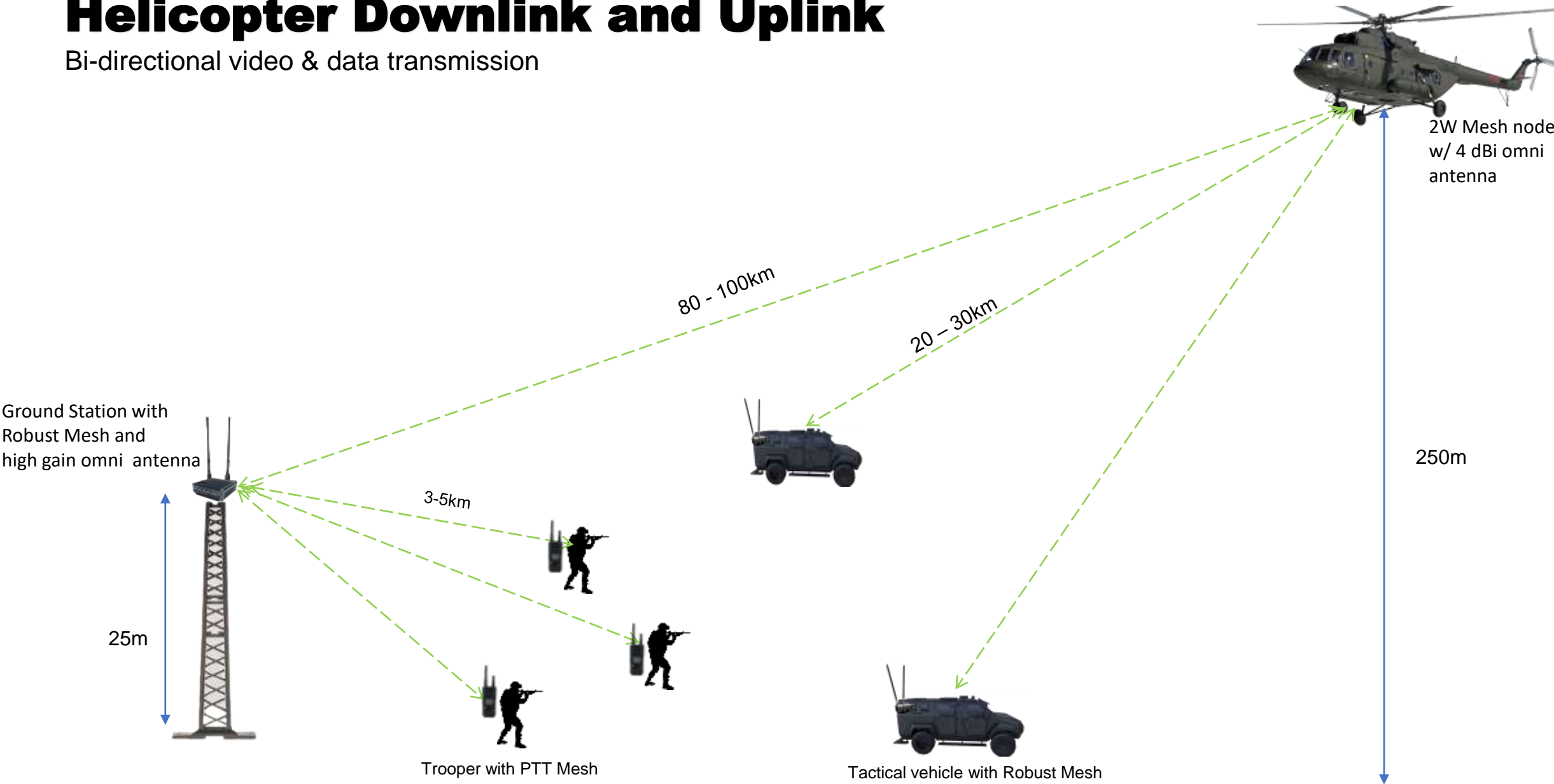
OCI

mMESH Technology

Connection on the move

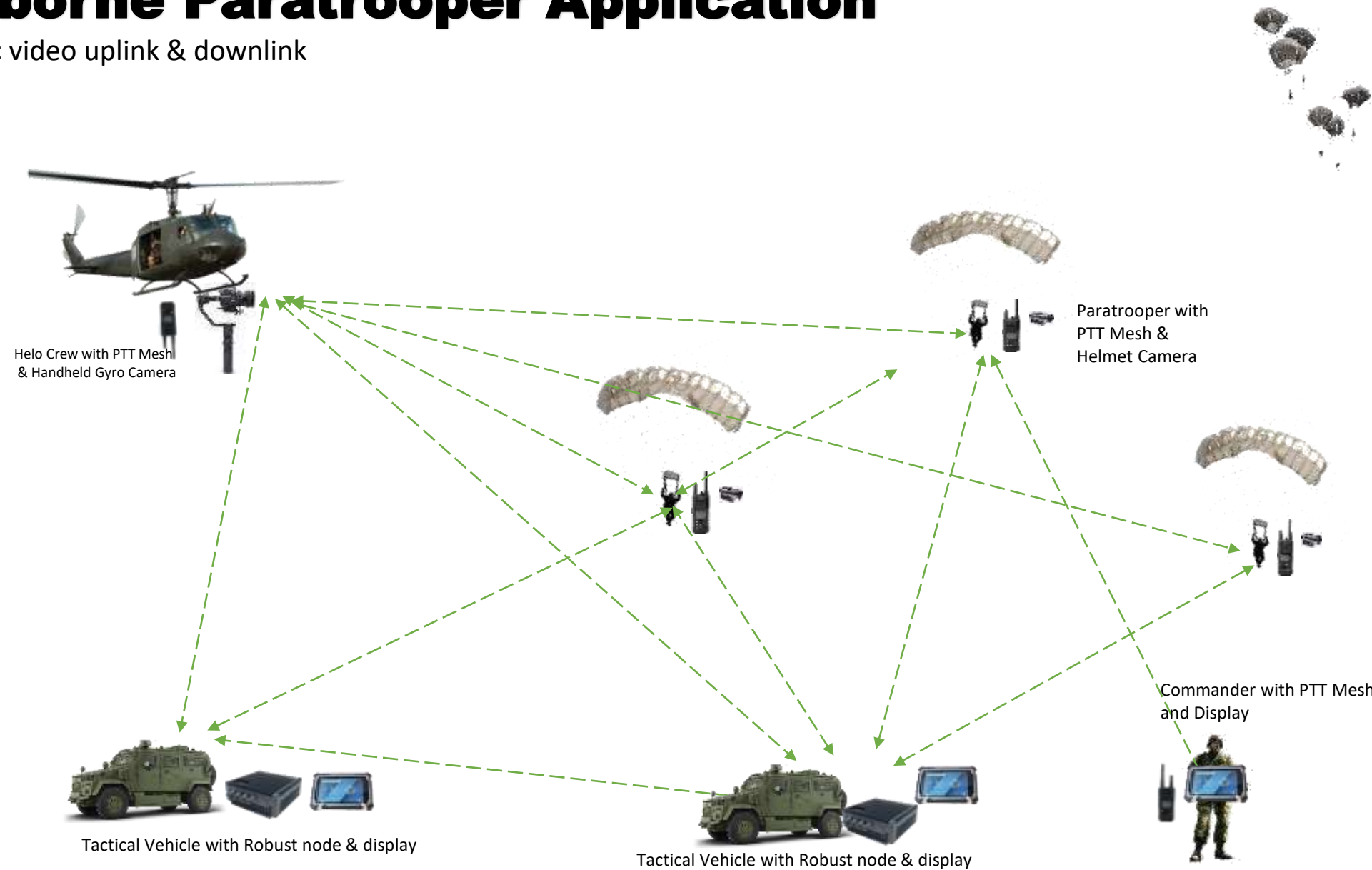
Helicopter Downlink and Uplink

Bi-directional video & data transmission



Airborne Paratrooper Application

Ad-hoc video uplink & downlink



Soldier Solution

Real-time video transmission via weapon scope / body camera (wired or wireless)



Sniper Scope View



Gun Camera View



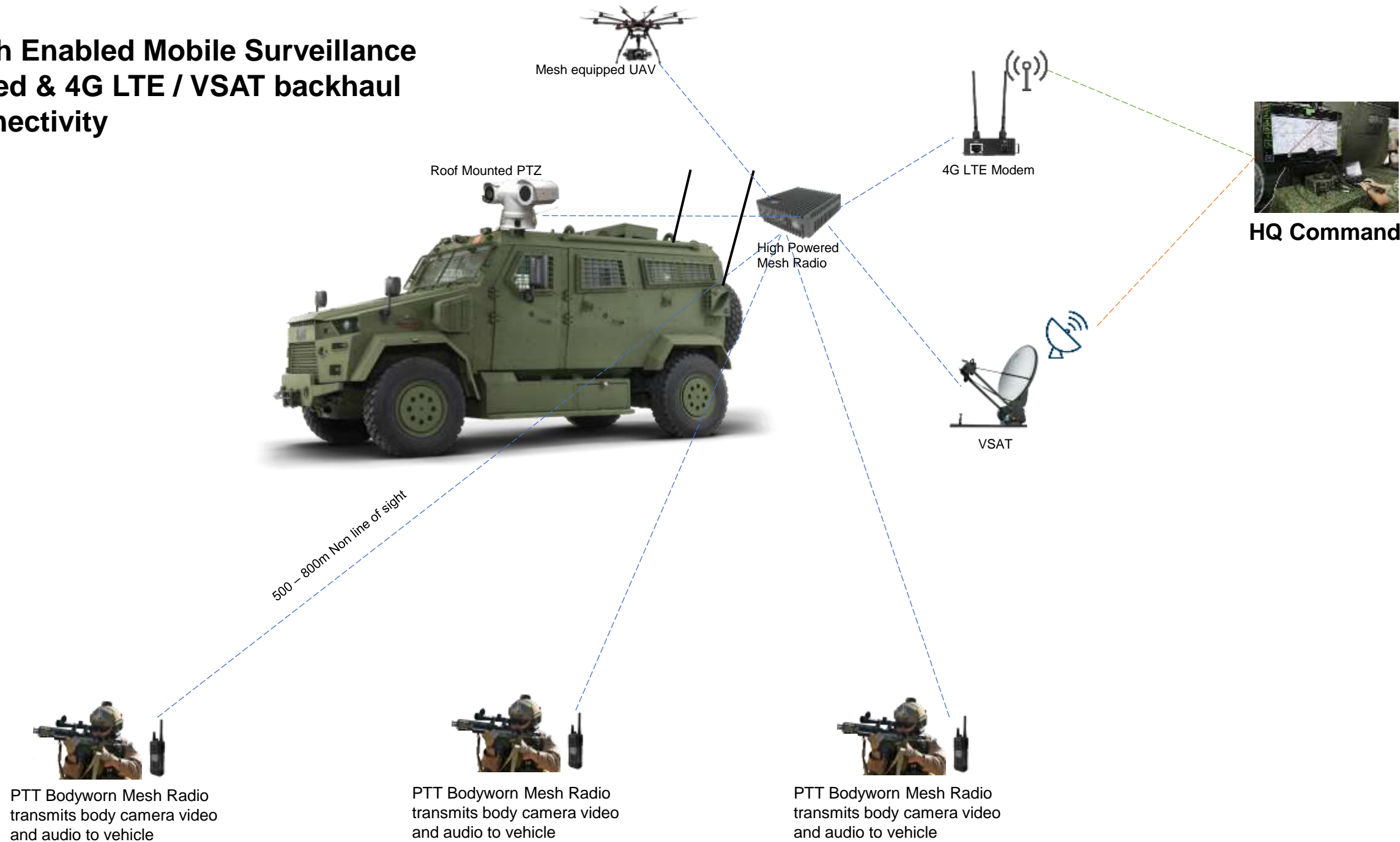
Body Camera View

mMESH

Better Situation Awareness

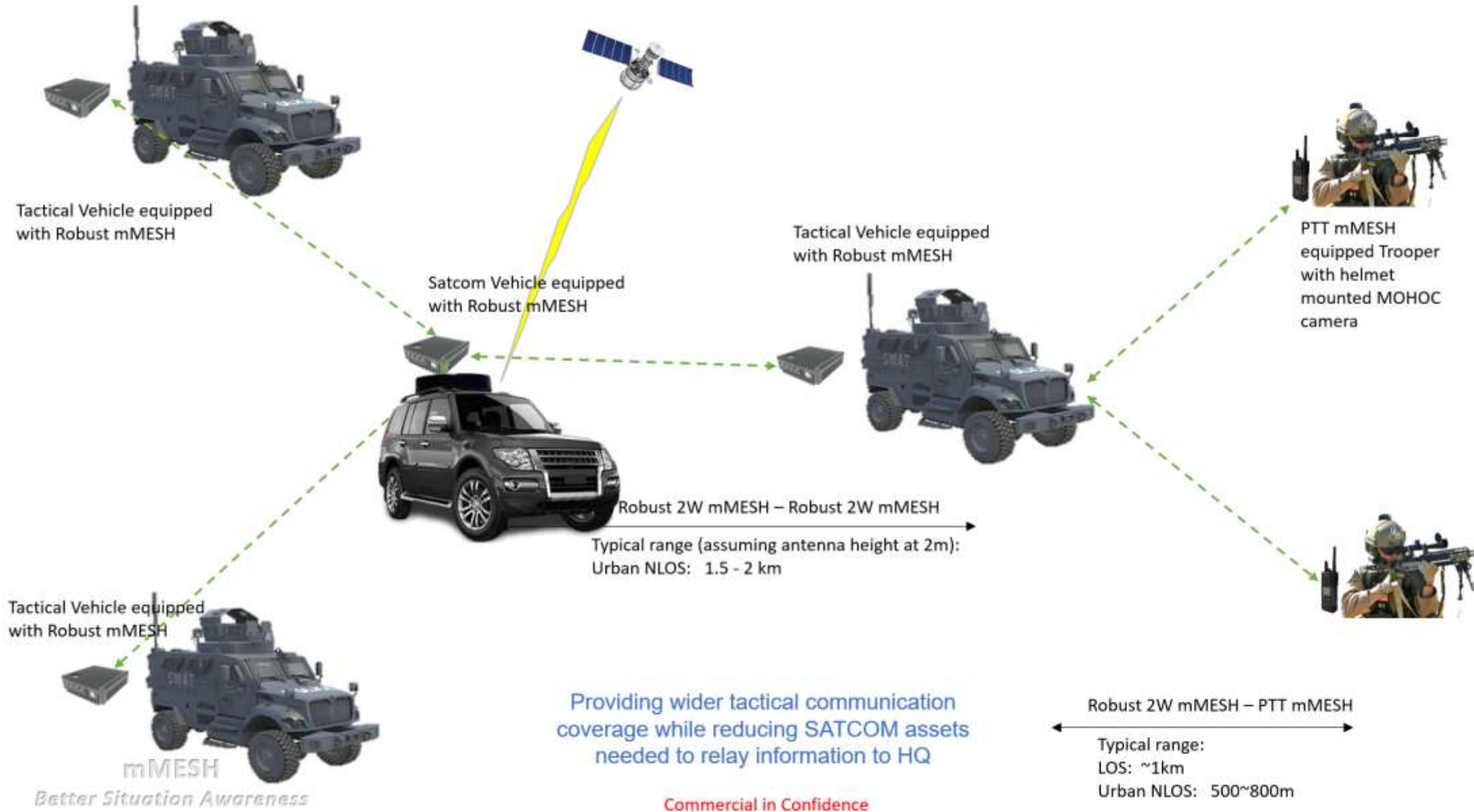
Commercial in Confidence

Mesh Enabled Mobile Surveillance Paired & 4G LTE / VSAT backhaul connectivity



MESH in Urban Operations

Non line of sight secured datalink combined with SATCOM on the move



Soldier & K9 Solution

Real-time tactical solution for assault and rescue mission



Streamed video on handheld device paired with PTT mesh



PTT mesh equipped K9 streaming via panoramic dome camera and via goggle camera



Multiple real-time videos displayed at Commander's node tablet

mMESH

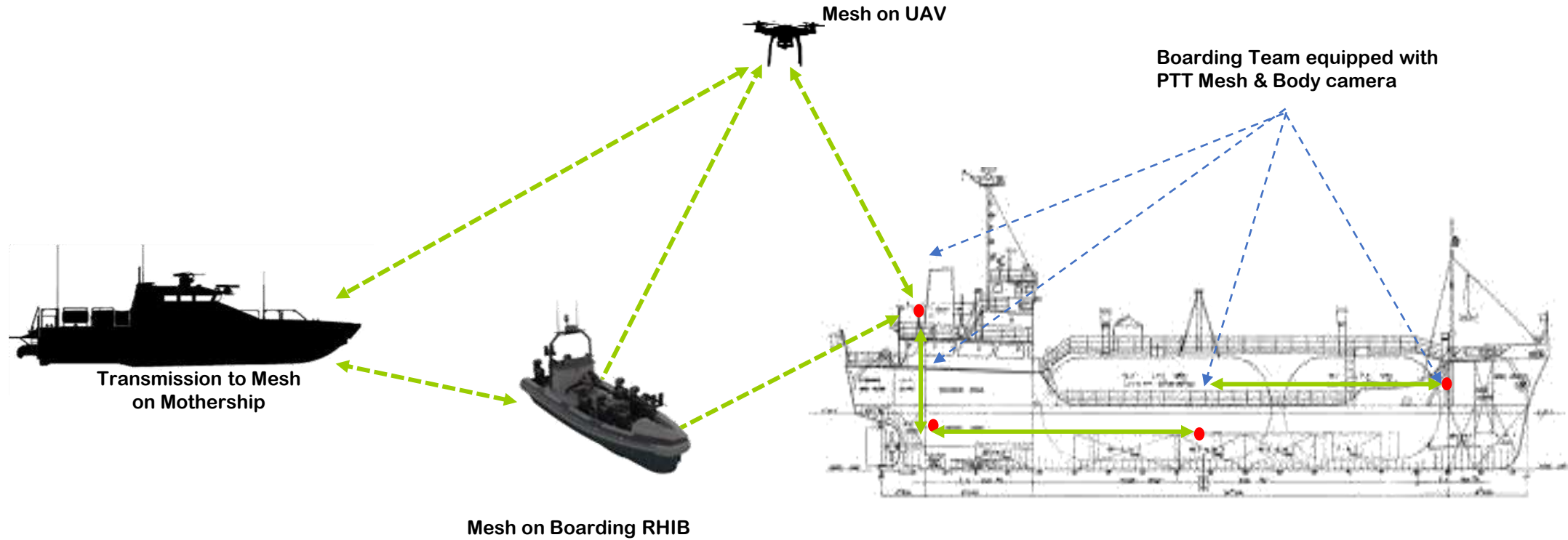
Better Situation Awareness

Commercial in Confidence

Mesh Applications

– Maritime Ship-Boarding Law Enforcement (VBSS)

mMESH overcomes communications issues under deck



- Maritime law enforcement involves below deck operation which posed challenges to legacy radio assets
- mMESH Technology solves this issue with superior signal routing & self adapting algorithm

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Better Situation Awareness

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mMESH Technology

Integrated into Various Manufacturer's Design



mMESH OEM Core BD-1



mMESH OEM Core BD-2



mMESH OEM Core BD-3



End products powered by mMESH integrated by various Data Radio manufacturers



CORE BOARD SPECIFICATIONS



RF Specifications

Waveform	COFDM
Frequency Range	
BD-C203-007045	70 - 450MHz
BD-C203-046250	460 - 2500MHz
BD-C203-475505	4750 - 5050MHz
Carrier Bandwidth	0.3* / 2.5 / 5 / 10MHz
Max Throughput	28Mbps
RF Output	-10dBm
Carrier Modulation	QPSK / 16QAM / 64QAM / 256QAM
FEC Rate	FEC 1/2, 3/4
Receive Sensitivity	-100dBm @ 5MHz
RF Interface	2x Tx, 2x Rx, 1x WIFI, 1x GPS



Power

Power Input	7 to 14.5Vdc
Power Consumption (Max)	4W



Physical Specifications

Dimensions (L x W x H)	90 x 55 x 12.7mm
Weight	~80g



Environment

Operating Temperature	-40 to 65°C
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Streaming

Streaming Protocol	UDP, RTSP, RTP
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Networking

Ethernet	10 / 100Mbps
WIFI	2.4 / 5.0GHz



Audio

Audio Codec	Adaptive Multi-Rate (AMR)
Data Bitrate	4.8Kbps



I / O

RS232, RS485, TTL, SPI, GPIO, Ethernet, USB



Security

Data Encryption	DES / AES 128** / AES 256**
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- T.B.C. / Under Development
- ** License Required

For more information on Licenses and Features, please contact your local salesperson.

mMESH Technology

New generation wireless transmission

Key Features

- Designed for mobility.
- Fast and easy deployment.
- Small and light.
- Low-powered devices with long range transmission.
- Up to 32 IP Radio nodes for each Frequency network. (64 nodes options available now for Narrow Band transmission)
- Up to 56 Mbps data throughput on 20 MHz carrier bandwidth
- Available in UHF, L, S and C Band
- Fluid Self Healing.
- Multi-directional.
- Operates on a single frequency network
- Different frequency networks can be fused at IP layer
- Low powered devices with high throughput.
- Each node can be a source of IP video, audio or data.

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Better Situation Awareness

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mMESH Handheld Radio

Ext CVBS/HDMI Encoder
For Handheld Radio



mMESH Robust



mMESH High Power Robust