

Mesh Rider® Radio

Wearable



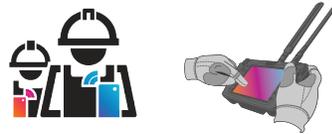
Your Own Private Wireless Network, on the Fly

Easy to Deploy



Designed for:

Connected Teams and GCS



Wearable Mesh Rider® Radios enable tactical units and teams of connected workers to stay connected, share high-bandwidth data and use their own internet-enabled devices. They also excel when paired with a GCS for advanced drone and ground robotics applications.

- High Throughput:** Up to 80 Mbps
- Long Range:** 80+ kilometers, ground-to-air; over 3 kilometers, ground-to-ground
- Multiband:** Unlicensed and Federal Band configurations
- Sense:** Advanced interference-avoidance
- Compliant:** Tested and certified
- Encryption:** Up to FIPS 140-3
- Versatile:** Carried or mounted; battery- or continuously-powered
- Low Cost:** From €1300-5700
- Ruggedized:** IP-68 rated
- Network Extension:** Access LTE/5G and Satcom extended into remote settings

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DOODLE
LABS

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Multi-band Wearable Mesh Rider® Radio

COMPACT

Size - 134 x 63 x 17mm
Weight - 203 grams



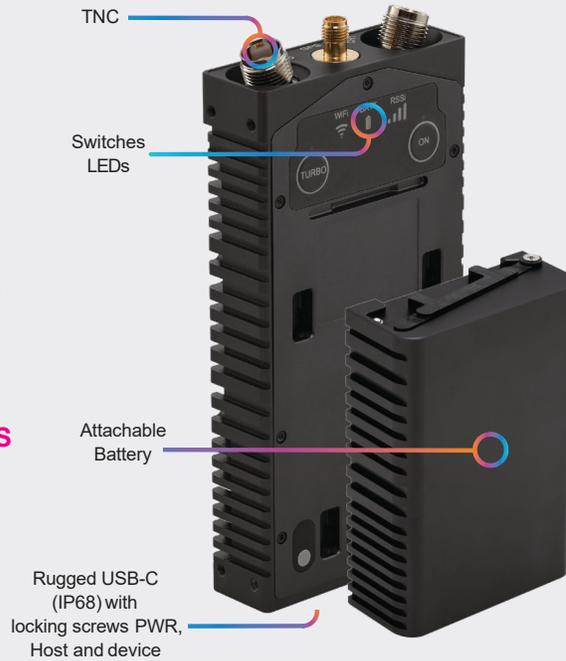
RAPID DEPLOYMENT

Connect any internet-enabled device to the mesh network



MULTIPLE POWER OPTIONS

- Attachable battery pack
 - Wide operating voltage range 6~24v
 - USB-PD compliant power input



RUGGED

- Waterproof IP68
- Rugged TNC connectors
- Rugged USB connectors (screw lock)
- Enhanced ESD protection on all I/O
- Drain plug to avoid condensation
- Coated with Nano liquid to avoid salt corrosion (optional for Govt models)



INTERFERENCE AVOIDANCE

- Multi-band for spectrum diversity
- Sense feature enables intelligent, automatic band and channel switching
- Designed for anti-jamming

Performance Overview

Operating Range Up to 2 km HD video streaming ground to ground; over 80+km ground to air

Max Data Throughput 80Mbps

Easy to Use Connect mobile devices to the Mesh Rider network



Mesh Rider Radios Mesh, WDS AP, WDS Client, Internet Gateway

Network Extension Integration with cell phones and LTE and Satellite radios

Encryption 256-bit AES & 128-bit AES FIPS 140-3 Level 3

TAK  Seamless integration with Civilian and Government Team Awareness Kit frameworks

Mesh Rider

Mesh Self-Forming/ Self-Healing; Peer to Peer

Sense Advanced Interference-avoidance

RF Specifications

Frequencies Multiple bands on a single radio; options from 900 MHz - 6 GHz

Channel sizes 20/15/10/5/3

Hardware Specifications

Dimensions 134.3mm x 63.0mm x 17.0mm

Weight 203 grams
467 grams with battery

Interfaces Ethernet (100 Base-T); USB-Dev; USB-Host, UART

Connectors USB-C locking x2

Antenna Connectors TNC

Max Tx Power 1Watt

Power Consumption 14W (peak) 6W (receive) 2W standby

Battery

Battery Capacity 35 Wh (Expected run time 8-10 hours)
2x 21700 Li-on cells, BMS

Dimensions 88x60x25mm

Weight 260 grams (Est)

Pricing

Pricing From €1300-5700

Certifications and Compliance



Doodle Labs designs and produces industrial-grade wireless networking solutions. The company focuses on mesh networking for robotic systems, providing high throughput, long-range Mesh Rider solutions for UAVs, UGVs, AMRs, connected teams, government/ defense, private wireless and other applications.

