Deploy Your MANET Quickly and Easily

Robot By: IROBOT

TW GHOST 870 RADIO

The TW Ghost 870 radio is the smallest form factor TSM-enabled TrellisWare radio without having to integrate at the board level. It provides the simplest integration path for platforms and assets that do not require the complete feature set of a dismounted user radio.

Deploying and integrating the TW-870 is achieved by connecting RF and GPS antennas, data, and power. This saves significant upfront engineering time and costs for platform providers, allowing end users the ability to integrate the TSM waveform without specialized technical expertise.
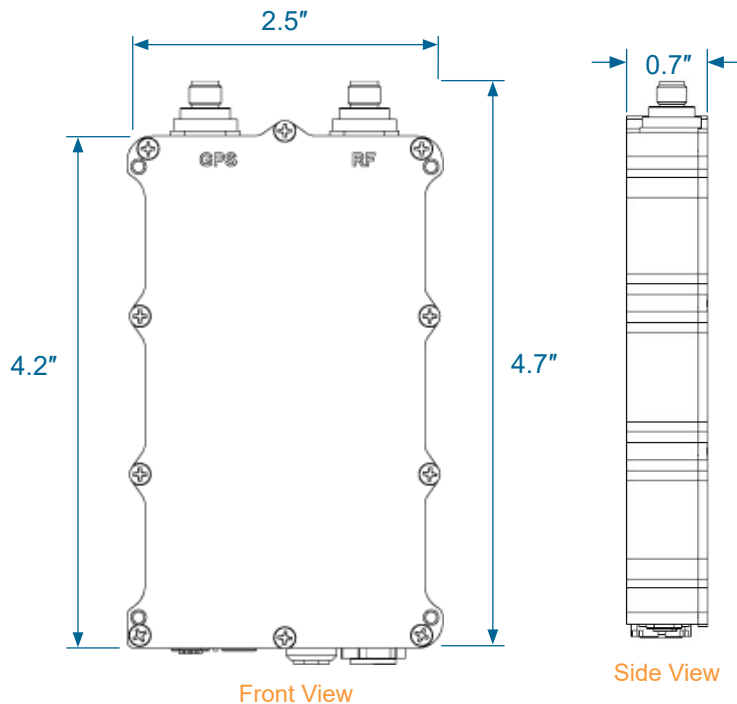
KEY FEATURES

- Fully integrated, self-contained radio module for integration into third-party systems with minimal engineering effort
- Accepts outside power, has GPS and RF antenna connectors, and a data interface
- Covers the UHF, L-band, and S-band frequencies
- Ideal for fast-deployed Mobile Ad Hoc Networking (MANET) scenarios
- Designed for quick integration into uncrewed systems and other platforms where space and weight are factors
- Cost-effective option when mission set only requires relay for data transfer and/or network extension
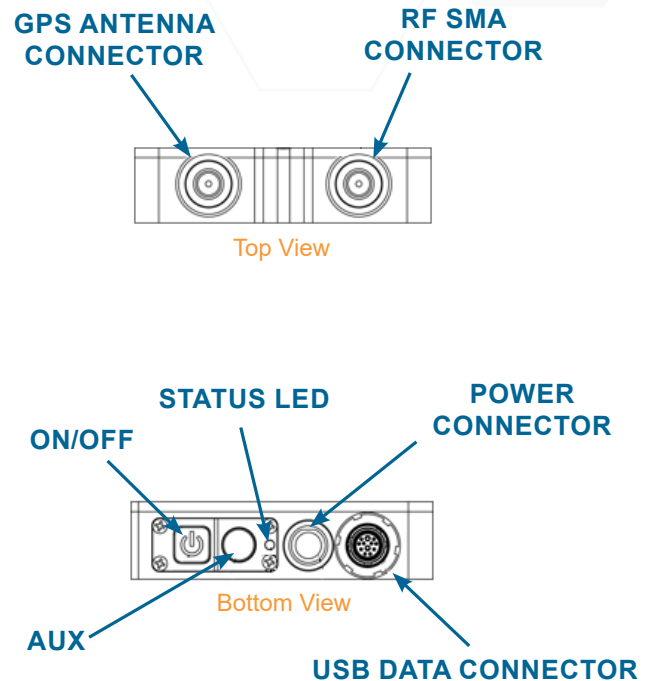- FCC/IC-certified configuration available

TRELLISWARE WAVEFORMS

TrellisWare's Barrage Relay technology provides proven network scalability and performance without compromising quality of service. The TSM waveform is a highly scalable and robust MANET waveform that supports over 800 nodes with simultaneous voice, data, video, and PLI operating in a single radio frequency channel. The optional Katana waveform combines resilient narrowband fast frequency hopping with tactical MANET, operating in highly contested radio frequency (RF) communication environments.

SCAN ME

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COMPONENTS

GPS ANTENNA CONNECTOR   RF SMA CONNECTOR

Top View

STATUS LED   POWER CONNECTOR
ON/OFF

AUX

Bottom View

USB DATA CONNECTOR

2.5″
0.7″
4.2″   4.7″

GPS   RF

Front View   Side View

SPECIFICATIONS

Physical	
Overall Size	4.7 L x 2.5 W x 0.7 H in (119 x 64 x 17 mm)
Weight	0.5 lbs (249 g)
Frequency Range	• LUHF: 225–450 MHz • U-UHF: 698–970 MHz • L/S Bands: 1250–2600 MHz
Bandwidth/Channel Spacing	Wideband: 1.2, 3.6, 10, 20 MHz Narrowband: 6.25, 8.33, 12.5, 20, 25, 50 kHz
Transmit Power	.001 mW, .01 mW, .1 mW, 10 mW, 100 mW, 250 mW, 500 mW, 1 W, 2 W
Input Power	8–20 VDC
Connectors	• USB On-the-Go • RF SMA • GPS SMA • 4-Pin ODU Power
Environmental	MIL-STD-810G, IP68
Operating Temperature Range	-20°C to +55°C (-4°F to +131°F)
Audio Encoding	AMR 5.9, MELPe
Waveforms	• TSM • NB LOS • Katana (optional)
GNSS	GPS

Networking Capabilities	
Network Coverage	• Barrage Relay • Multi-hop – Up to 8 Hops • 800 Nodes in a Single RF Channel • Robust in Harsh RF Environments • Up to 32 Mbps
Communication Services	• Simultaneous Voice, Data, and PLI • IP Support – IPv4, IPv6; Unicast, Multicast, Broadcast; TCP, UDP
Security	• AES-256 (FIPS 197)
Application Support	• Built-in Web Applications • Over the Air Remote Control • TW Connect • ATAK support

Specifications subject to change without notice.

Note: For Military and Public Safety Use. Please contact TrellisWare Customer Support at **support@trellisware.com** for FCC/IC radio options, or EU and UK declarations.

UK CA | CE

When Nothing Else Works

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To place an order, please contact your account manager. For more information, email sales@trellisware.com

Please access the most recent digital version of this datasheet on the TrellisWare Customer Support Site (site registration required)