



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 dismantled 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.

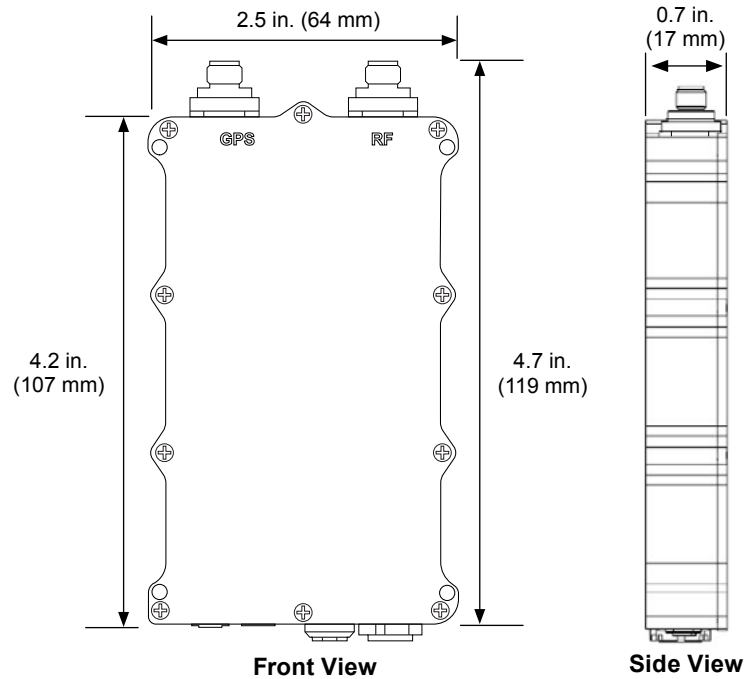
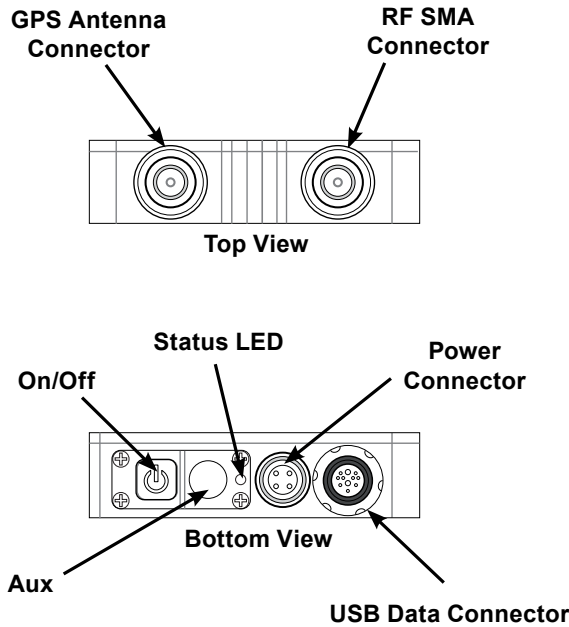
KEY FEATURES

- 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 delivers proven network scalability and performance, ensuring quality of service without compromising operational demands as they evolve, empowering users to stay connected *When Nothing Else Works*. TrellisWare's TSM waveforms are globally recognized as the industry standard for resilient communications, delivering scalable and adaptable services for voice, video, data, and Position Location Information (PLI). The optional Katana waveforms add fast frequency hopping with tactical MANET for operations in highly contested radio frequency (RF) conditions. TrellisWare's multi-waveform capabilities set the standard for resilient communications solutions with a large ecosystem of interoperable platforms.





Specifications	
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	
Standard	<ul style="list-style-type: none"> • L-UHF: 225–450 MHz • U-UHF: 698–970 MHz • L/S Bands: 1250–2600 MHz
FCC/IC	<ul style="list-style-type: none"> • 902-928 MHz (Use with TW-1149 antenna) • 2400–2483.5 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	
Standard	.001 mW, .01 mW, .1 mW, 10 mW, 100 mW, 250 mW, 500 mW, 1 W, 2 W
FCC/IC	100 mW, 250 mW, 500 mW, 1 W
Input Power	8–20 VDC
Connectors	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • TSM – Barrage Beamforming (optional)
GNSS	GPS

Networking Capabilities	
Network Coverage	<ul style="list-style-type: none"> • Barrage Relay • Multi-hop – 205 miles (330 km) per hop • Hosts multiple waveforms • Robust in Harsh RF Environments • Throughputs of 50+ Mbps supported
Communication Services	<ul style="list-style-type: none"> • Simultaneous Voice, Data, and PLI • IP Support – IPv4, IPv6; Unicast, Multicast, Broadcast; TCP, UDP
Security	AES-256
Application Support	<ul style="list-style-type: none"> • 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.



When Nothing Else Works
T R E L L I S W A R E . C O M

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).
support.trellisware.com

This TrellisWare product is under the jurisdiction of the Department of Commerce and is subject to Export Administration Regulations (EAR)