

Product Specification Sheet TW SHADOW 900/950 RADIO

TrellisWare

ALT 9 WXYZ

# Pioneering The Edge Of Tactical Networking

## TW SHADOW 900/950 RADIO

#### WIDE FREQUENCY RANGE, HIGH THROUGHPUT

The TW Shadow 900/950 radio features unparalleled performance powered by the TSM and Katana waveforms. TrellisWare's signature radio provides an expanded frequency range, high throughput for streaming multiple high definition (HD) video, and offers the most flexible data interface options in its class.

#### **KEY FEATURES**

- FCC/IC-certified configuration available for the TSM waveform
- Industry-leading size, weight, and power (SWaP) among tactical networking radios that lightens the load for users
- Support for SD, HDMI, and H.264 video and multicast streaming
  - Cellular-quality prioritized voice slots with support of up to 32 talk-groups enabling large-scale networks
  - Ability to ingest analog SD video or encoded high definition (HD) video for multi-cast streaming
- Built-in Multi-Net Bridge (MNB) capability can be used to connect geographically disparate networks or RF-separated networks over any IP link and allow them to act like a single larger network, bridging voice, PLI and data
- Accessory offering enables a wide range of use cases with multiple power options, data interfaces, and audio ancillaries

#### **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.





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#### **SPECIFICATIONS**

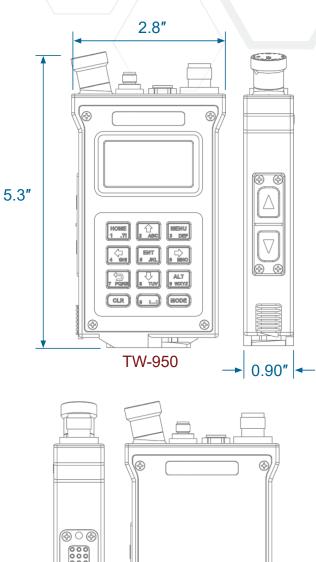
Physical	
Overall Size	5.3 L x 2.8 W x 0.90 H in (135 x 70 x 23 mm)
Weight	Without Battery 0.6 lbs (265 g) With Battery 1.0 lbs (471 g)
Frequency Range	• L-UHF: 225–450 MHz • U-UHF: 698–970 MHz • L/S Bands: 1250–2600 MHz
Configurable Bandwidth	1.2, 3.6, 10, 20 MHz
Spectrum Pipelining Bandwidth	User-Selectable Spacing with 20 or 40 MHz Occupied Bandwidth
Transmit Power	100 mW, 250 mW, 500 mW, 1W, 2W
Rechargeable Battery	32 Wh recharge with desktop and vehicle chargers
Connectors	ODU Data/Audio, TNC RF, SMA GPS     36-Pin Side Connector
Data Rate	Up to 32 Mbps
Environmental	MIL-STD-810G
Operating Temperature Range	-20°C to +55°C (-4°F to +131°F)
Water Resistant	IP68
Audio Encoding	AMR 5.9, MELPe, AAC Audio
Video Encoding	SD and HD H.264
Waveforms	TSM, Katana (optional)

Networking	
Network Coverage	<ul> <li>Mobile Ad Hoc Networking</li> <li>Multi-hop – Up to 8 Hops</li> <li>800 Nodes in a Single Network</li> <li>Robust in Harsh RF Environments</li> </ul>
Communication Services	<ul> <li>Simultaneous Voice, Data, and PLI</li> <li>Up to 32 Voice Talk Groups</li> <li>Built-in or External GPS</li> <li>IP Support – IPv4, IPv6; Unicast, Multicast, Broadcast; TCP, UDP</li> </ul>
Security	• AES-256
Application Support	<ul> <li>Built-in Web Applications</li> <li>Over the Air Remote Control</li> <li>APIs for 3<sup>rd</sup> Party Integration</li> <li>PLI with CoT, KML, and JSON</li> <li>Integration with Android<sup>™</sup></li> </ul>

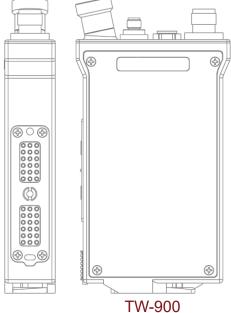
Specifications subject to change without notice.

Note: For military and public safety/security use. Please contact TrellisWare Customer Support at support@trellisware.com for FCC/IC radio options, or EU and UK declarations.





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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)