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) videos, and offers the most flexible data interface options in its class.

KEY FEATURES

- 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

- FCC/IC-certified configuration available for the TSM waveform

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.
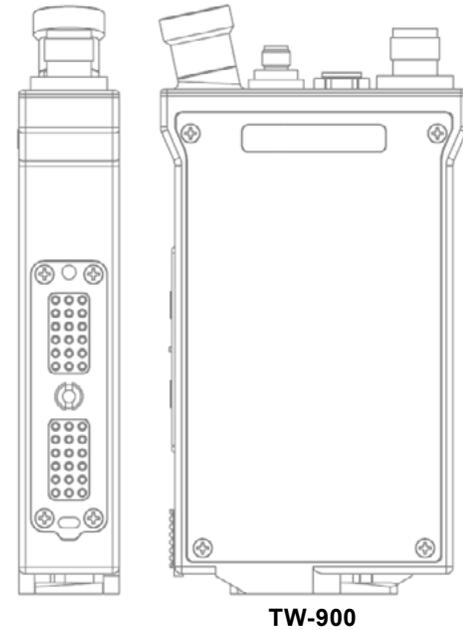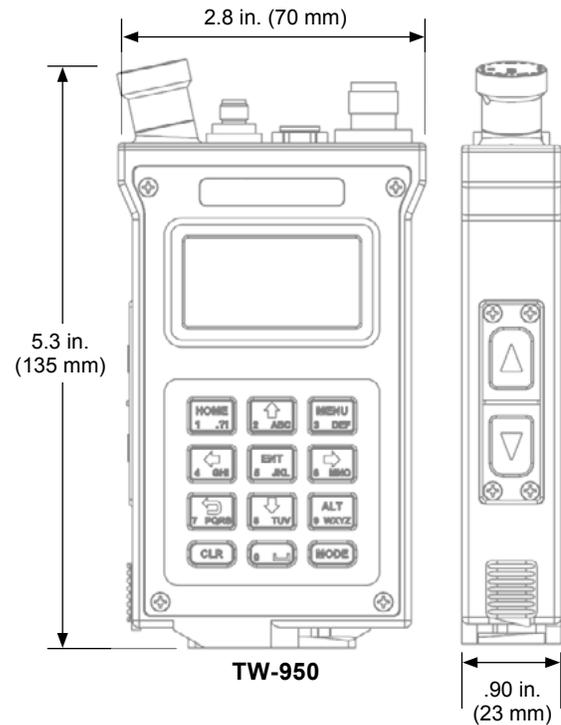
SCAN ME

TRELLISWARE.COM

Specifications

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
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, .1mW, 10 mW, 100 mW, 250 mW, 500 mW, 1W, 2W
Rechargeable Battery	32 Wh
Connectors	• ODU Data/Audio, TNC RF, SMA GPS • 36-Pin Side Connector
Environmental	MIL-STD-810H; IP68 (2 meters)
Operating Temperature Range	-20°C to +55°C (-4°F to +131°F)
Audio Encoding	AMR 5.9, MELPe, AAC Audio
Video Encoding	SD and HD H.264
Waveforms	• TSM – Barrage Beamforming (optional) • NB LOS • Katana NB (optional)
GNSS	GPS

Networking Capabilities

Network Coverage	• 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	• Simultaneous Voice, Data, and PLI • 32 Voice Talk Groups • Built-in or External GPS • 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 • APIs for 3rd Party Integration

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.

FC | C € | UK CA

ISO 9001:2015 Certified

2.8 in. (70 mm)

5.3 in. (135 mm)

TW-950

.90 in. (23 mm)

TW-900

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

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