TrellisWare
T E C H N O L O G I E S

The Most Powerful Networking Radio

TW-135 TSM SHADOW HIGH POWER RADIO (HPR)

HIGH POWER NETWORKING

TrellisWare's TW-135 TSM Shadow HPR complements the TW-950 TSM Shadow by providing greater transmission power and supports a wide range of configurations.

KEY FEATURES

- Contains all of the features of the TW-950 radio
- Delivers 20 Watts of transmit power in UHF, L-band, and S-band to extend and strengthen MANET networks
  - Provides long-range transmissions as a backhaul in challenging environments
  - Capable of greater than 200 miles when Long Range Mode license feature is enabled
- Versatile form factor that supports vehicular, airborne, fixed-site, or manpack configurations
  - MIL-STD-1275 compliant power interface to support military vehicle installation
- Shares common accessories with the TW-900/950 handheld radio to maximize flexibility and save life cycle cost

PROVEN SCALABILITY AND PERFORMANCE

TrellisWare's patented Barrage Relay networking eliminates the need for routing protocols and allows for massive network scalability with low overhead. The TrellisWare TSM waveform is a highly scalable and robust Mobile Ad Hoc Networking (MANET) waveform designed from the ground up to support over 800 nodes with simultaneous voice, data, video, and Position Location Information (PLI) operating in a single radio frequency channel. The TrellisWare Katana waveform combines resilient narrowband fast frequency hopping with tactical MANET, operating in highly contested radio frequency (RF) communication environments.
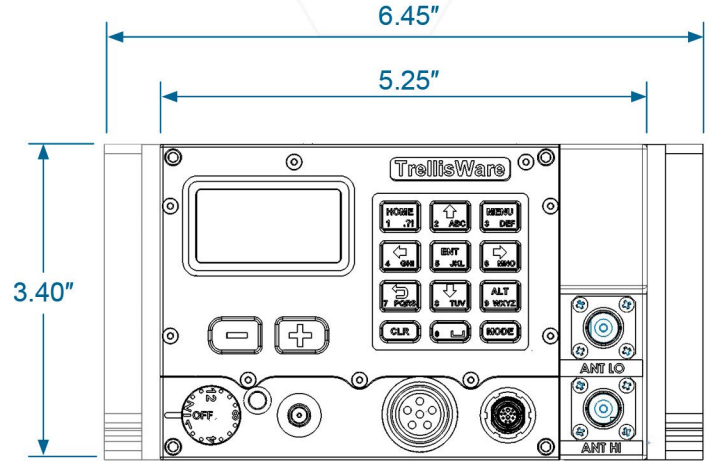
SCAN ME

TRELLISWARE.COM

TW-135

SPECIFICATIONS
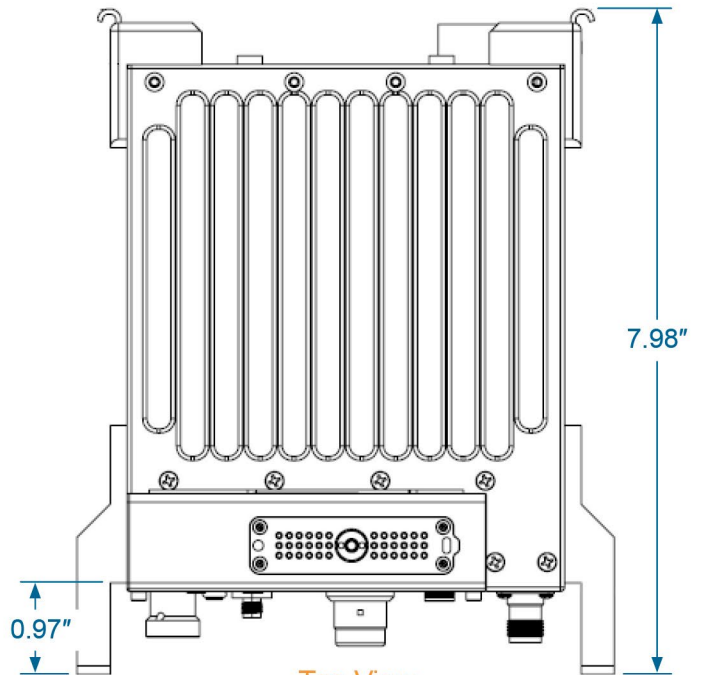
Physical	
Overall Size	7.98 L x 6.45 W x 3.4 H in (202.69 x 163.83 x 86.36 mm)
(Without Handles)	7.46 L x 5.25 W x 3.4 H in (189.48 x 133.35 x 86.36 mm)
Weight (Without Battery)	6.40 lbs (181.44 g)
Frequency Range	• LUHF: 225–450 MHz • U-UHF: 698–970 MHz • L/S Bands: 1250–2600 MHz
Configurable Bandwidth	1, 2, 3, 6, 10, 20 MHz
Spectrum Pipelining Bandwidth	User-Selectable Spacing with 20 or 40 MHz Occupied Bandwidth
Transmit Power	100 mW, 2 W, 5 W, 10 W, 20 W
Input Power	20–33 VDC
Battery Life	8 hrs on a 8.7Ah Rechargeable Battery
Connectors	• ODU Data/Audio, 6-Pin Audio, TNC RF, SMA GPS • 36-Pin Top Connector
Data Rate	Up to 32 Mbps Pt. to Pt.
Environmental	MIL-STD-810G
Operating Temperature Range	-20°C to +55°C (-4°F to +131°F)
Water Resistant	IP67
IP Support	IPv4, IPv6; Unicast, Multicast, Broadcast; TCP, UDP
Audio Encoding	AMR 5.9, MELPe, AAC Audio
Video Encoding	SD and HD H.264
Net Entry Time	< 1 Second
Waveform	TSM, Katana (Optional)

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

Specifications subject to change without notice.

6.45″
5.25″
3.40″

Front View

7.98″

0.97″

Top View

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