



**TrellisWare**  
TECHNOLOGIES

## THE INTEROPERABILITY STANDARD FOR RESILIENT COMMUNICATIONS

J O I N     T H E       
T R E L L I S   //   S P H E R E



TrellisWare Technologies, Inc. launched in 2000 with an innovative culture striving to push technological boundaries in the area of resilient communications for commercial, government, and military end users. Our algorithms, waveforms, and communications systems range from small form factor radio products to fully integrated solutions. TrellisWare is setting the standard for the next generation of communications ***When Nothing Else Works.***

TrellisWare's technology facilitates mission-critical voice and data delivery in the most severe conditions. The result is an exceptionally robust, flat network that provides unprecedented scalability and supports hundreds of nodes while using less spectrum than any other Mobile Ad Hoc Networking (MANET) technology. TrellisWare's TSM and Katana waveforms are incorporated into a wide range of systems, including TrellisWare radios, trusted industry partner radios, and multiple government and commercial solutions.

In true collaboration, we are working with an ever-growing community of integrators, end users, and government stakeholders to develop the most capable networking solutions enabled by TrellisWare technology. We call this the **Trellis//Sphere**.

### PROVEN SCALABILITY AND PERFORMANCE WITH TRELLISWARE WAVEFORMS

The TSM waveform is a highly scalable and robust MANET waveform that supports over 800 nodes with simultaneous voice, data, video, and Position Location Information (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.




The result is an ecosystem that forms the most powerful network, enabling interoperability between partner platforms, sensors, and systems.

**Come join us in the Trellis//Sphere and see what we can accomplish together.**

**TRELLISWARE.COM**

## TRELLISWARE'S WAVEFORMS AND RADIO SOLUTIONS ARE USED BY THE MILITARY, PUBLIC SAFETY, UNCREWED MARKETS, AND OTHER COMMERCIAL INDUSTRIES WHERE RESILIENT WIRELESS COMMUNICATIONS ARE REQUIRED

- Global frequency support covering the UHF, L-band, and S-band (225 - 450 MHz, 698 - 970 MHz, and 1250 - 2600 MHz) in a single radio, maximizing effectiveness and minimizing complexity.
- Software Defined Radio (SDR) technology with multi-waveform support capable of operating the TSM and optional Katana waveforms, for an all-in-one resilient networking solution that supports dynamic mission environments.
- Built-in Advanced Encryption Standard (AES) security protects voice, PLI, data, and networking traffic.
- Interoperable with Type 1-encrypted partner radios operating TSM-X, WREN TSM, and WREN-NB waveforms.

Product Name	Radio Image	Size and Weight	Description
<b>TW Shadow 950 Radio</b>	 <small>Image shown with TW-1450 battery</small>	5.3 L x 2.8 W x 0.9 H in (135 x 70 x 23 mm) Without Battery 0.6 lbs (265 g) With Battery 1.0 lbs (471 g)	Provides an expanded frequency range, higher throughputs for streaming multiple HD videos, and offers the most flexible data interface options in its class.
<b>TW Shadow 750 Radio</b>	 <small>Image shown with standard antenna</small>	7.4 L x 2.5 W x 1.5 D in (187 x 64 x 39 mm) Without Battery 0.6 lb (272 g) With Battery 1.1 lbs (488 g)	A highly integrated handheld radio that addresses mission-critical communications challenges, putting MANET capability directly in the users' hands for simplified operation.
<b>TW Shadow 135 High Power Radio</b>		Overall 7.9 L x 6.5 W x 3.4 H in (203 x 164 x 86 mm) 6.4 lbs (181 g)	Complements the TW-950 TSM Shadow by providing greater transmission power and supports a wide range of configurations.
<b>TW Spirit 860 Radio</b>		4.7 L x 2.5 W x 0.7 H in (119 x 64 x 19 mm) 0.5 lbs (249 g)	Ideal for deployment at the edge of the network, designed for next-generation soldier systems, public safety, and first responder requirements.
<b>TW Ghost 875 Radio</b>		4.1 L x 2.5 W x 1.5 H in (103 x 64 x 37 mm) 1.0 lbs (450 g)	Provides flexibility in deploying and enhancing networks with a simplified radio design and built-in battery.
<b>TW Ghost 870 Radio</b>		4.7 L x 2.5 W x 0.7 H in (119 x 62 x 17 mm) 0.5 lbs (249 g)	Fully integrated, self-contained radio module for fast integration into third-party systems with little to no engineering effort.
<b>TW Ghost 880 Embedded Module</b>		4.1 L x 2.3 W x 0.7 H in (101 x 58 x 17 mm) 0.3 lbs (130 g)	Smallest, lightest, and most capable product for plug and play integration of the TrellisWare waveforms.
<b>TW Shadow 650 Core Board Module</b>		2.9 L x 2.0 W x 0.1 H in (74 x 51 x 3 mm) 0.1 lbs (34 g)	SDR architected for embedment into a wide range of systems, including tactical communications platforms, network devices, and uncrewed systems.

Specifications subject to change without notice.

**Note:** Please contact TrellisWare Customer Support at [support@trellisware.com](mailto:support@trellisware.com) for FCC/IC radio options and regulatory declarations.

The above TrellisWare radio products are under the jurisdiction of the Department of Commerce and are subject to the Export Administration Regulations ("EAR").



### PARTNER RADIOS OFFERING TRELLISWARE TSM WAVEFORMS

