



TrellisWare
TECHNOLOGIES



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

Celebrating our 20th anniversary year, TrellisWare launched in 2000 with an innovative culture striving to push technological boundaries in the area of wireless communications. We are now a worldwide leader in highly advanced algorithms, waveforms, and communications systems that range from small form factor radio products to fully integrated solutions.

Meeting future tactical communications challenges today

TrellisWare's technology is a critical component of modern tactical networks. Our TSM™ waveform is incorporated into a wide range of systems, including TrellisWare radios and trusted industry partner radios, as well as multiple government and commercial solutions. Our highly adaptable network 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, using less spectrum than any other Mobile Ad-hoc Networking (MANET) technology.

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

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

TSM™ WAVEFORM

TSM™ is the leading Mobile Ad-hoc Networking (MANET) solution to support uninterrupted communications in real dynamic environments. TrellisWare's proprietary technology, known as Barrage Relay™, eliminates routing, minimizes network overhead, and provides unrivaled scalability. TSM supports 400+ nodes in a single channel, enabling a truly flat network.

The TSM waveform provides mission critical voice, situational awareness, and data sharing without depending on infrastructure or pre-deploying equipment. As a true Software Defined Radio (SDR) waveform, the TSM waveform can be implemented on many different SDRs. The TSM waveform is also available in low SWaP SDRs that are embeddable into platforms ranging from commercial micro unmanned aerial systems to tactical radios. The result is an ecosystem that forms the most powerful network, enabling interoperability between partner platforms, sensors, and systems.

T R E L L I S W A R E . C O M



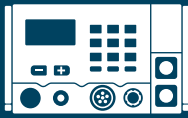
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MK-0011r6

TrellisWare radios are available in a variety of configurations to meet military and commercial needs:

- Full-featured handheld and vehicular configurations
- Small form factor modules for easy integration into unmanned systems for extending network range
- Single-board radios that fit into tight spaces to meet Size, Weight, and Power (SWaP) requirements



	TW-135 TSM Shadow™ HPR	TW-900/950 TSM Shadow®	TW-870 TSM Ghost™	TW-875 TSM Ghost™	TW-650 TSM Shadow® Module
Description	Connects multiple TSM™ networks, and expands network reach through increased transmit power	Ideal for streaming multiple HD videos, with flexible bandwidth and spectrum availability	Light weight, small form factor data modem for embedding into host platforms, perfect for unmanned systems	Low profile, small form factor to deploy as a relay or leave behind device for extending network range	Low SWaP module for integration, interoperability, spectrum flexibility, and end-user configuration
Use	Amplified Power for Vehicular or Aerial Networks	Wide Frequency Range, High Throughput	Small Form Factor (SFF) Radio	Small Form Factor with Built-in Battery	Embeddable Single Board SDR Module
Size	3.4" (H) x 5.25" (W) x 7.26" (D)	4.54" (H) x 2.76" (W) x 0.90" (D)	4.69" (H) x 2.46" (W) x 0.68" (D)	4.89" (H) x 2.50" (W) x 1.50" (D)	2.920 (H) x 2.0 (W) x 0.188 (D)
Weight	6.4 lbs.	11.3 oz.	8.8 oz.	16 oz.	1.12 oz.
Frequencies (MHz)	225-450 698-970 1250-2600	225-450 698-970 1250-2600	225-450 698-970 1250-2600	225-450 698-970 1250-2600	225-450 698-970 1250-2600
Bandwidth (MHz)	1.2, 4, 10, 20, 40	1.2, 4, 10, 20, 40	1.2, 4, 10, 20, 40	1.2, 4, 10, 20, 40	1.2, 4, 10, 20, 40
Transmit Power	2 W, 5 W, 10 W, 20 W	100 mW, 250 mW, 500 mW, 1 W, 2 W	100 mW, 250 mW, 500 mW, 1 W, 2 W	100 mW, 250 mW, 500 mW, 1 W, 2 W	100 mW, 250 mW, 500 mW, 1 W, 2 W
Interfaces	<ul style="list-style-type: none"> • 2-Channel radio audio • Up to 32 talk groups • Expanded side-connector 	<ul style="list-style-type: none"> • 2-Channel radio audio • Up to 32 talk groups • Expanded side-connector 	<ul style="list-style-type: none"> • Power, RF, GPS connectors • Data interface (up to 16 Mbps) 	<ul style="list-style-type: none"> • Internal Battery Powered • RF, GPS, data connectors • Continuous PLI reporting 	<ul style="list-style-type: none"> • Mounts for command & control, power, and audio • RF, GPS, USB, IP data

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