



# Simplify Your TSM Integration

## TW-880 TSM GHOST EMBEDDED MODULE

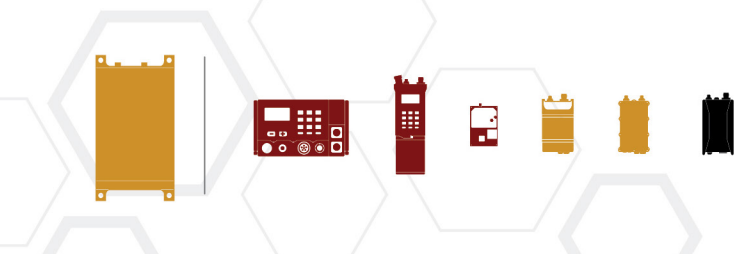
The TW-880 TSM Ghost Embedded Module was designed from the ground up to better meet communication systems integration requirements across a wide range of markets. The module provides interfaces and capabilities that integrators need in one of the industry's lowest size, weight, and power (SWaP) configurations.

### KEY FEATURES

- Smallest, lightest, and most capable product for plug and play integration of the TrellisWare TSM waveform.
- Requires minimal integration effort, significantly reducing non-recurring engineering costs and time to market.
- Includes Ethernet, Serial, and USB data interfaces to support transmission of command and control (C2) communications, status, and payload data over the TSM network.
- Supports operation across the 225-450 MHz, 698-970 MHz, and 1250-2600 MHz frequency bands to provide integrators and operators radio frequency (RF) spectrum flexibility without the need to swap radio modules.

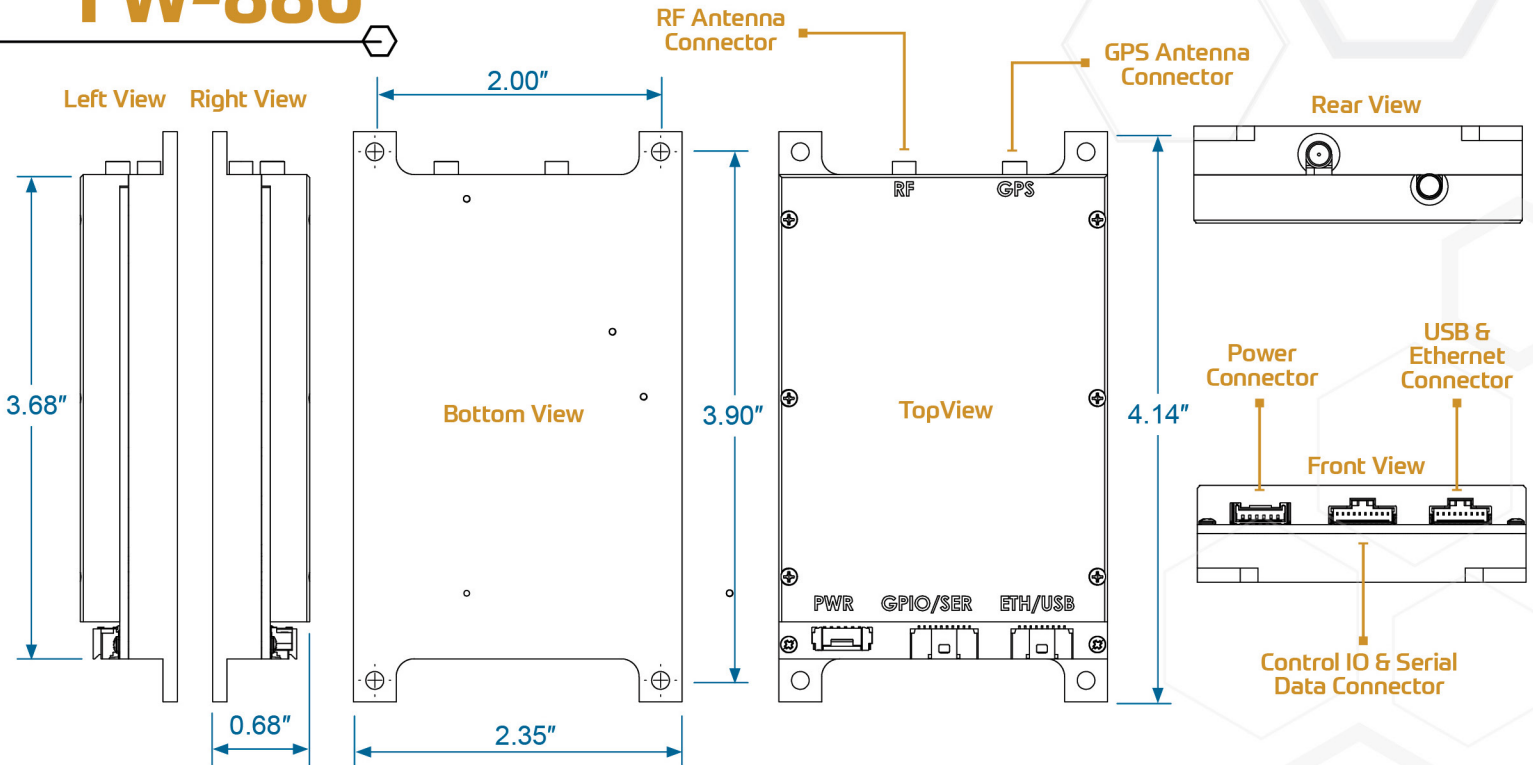
### PROVEN SCALABILITY AND PERFORMANCE

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.





# TW-880



## SPECIFICATIONS

Physical	
<b>Overall Size</b>	4.14 L x 2.30 W x 0.68 H in (101.34 x 58.42 x 17.27 mm)
<b>Weight</b>	4.6 oz (130.41 g)
<b>Frequency Range</b>	<ul style="list-style-type: none"> <li>• L-UHF: 225–450 MHz</li> <li>• U-UHF: 698–970 MHz</li> <li>• L/S Bands: 1250–2600 MHz</li> </ul>
<b>Configurable Bandwidth</b>	1.2, 3.6, 10, 20 MHz
<b>Spectrum Pipelining Bandwidth</b>	User-Selectable Spacing with 20 or 40 MHz Occupied Bandwidth
<b>Transmit Power</b>	100 mW, 250 mW, 500 mW, 1 W, 2 W
<b>Input Power</b>	8-20 VDC
<b>Interfaces</b>	<ul style="list-style-type: none"> <li>• USB On-the-Go</li> <li>• Ethernet</li> <li>• Control Status</li> <li>• Serial Data</li> <li>• RF SMP, GPS SMP</li> </ul>
<b>Data Rate</b>	Up to 32 Mbps Pt. to Pt.
<b>Security</b>	<ul style="list-style-type: none"> <li>• Built-in AES-256 COMSEC</li> <li>• TRANSEC</li> </ul>
<b>Environmental</b>	MIL-STD-810G Shock & Vibration
<b>Water Resistant</b>	IP41
<b>Operating Temperature Range</b>	-20°C to +55°C (-4°F to +131°F)
<b>Waveform</b>	TSM 6 (Katana Optional)

Networking	
<b>Network Coverage</b>	<ul style="list-style-type: none"> <li>• Mobile Ad Hoc Networking</li> <li>• Multi-hop – Up to 8 Hops</li> <li>• 400+ Nodes in a Single Network</li> <li>• Robust in Harsh RF Environments</li> </ul>
<b>Communication Services</b>	<ul style="list-style-type: none"> <li>• Simultaneous Voice, Data, and PLI</li> <li>• Relay node for all TSM services (Voice, Data, PLI)</li> <li>• Built-in or External GPS</li> <li>• IP Support – IPv4, IPv6; Unicast, Multicast, Broadcast; TCP, UDP</li> </ul>
<b>Security</b>	<ul style="list-style-type: none"> <li>• AES-256</li> </ul>
<b>Application Support</b>	<ul style="list-style-type: none"> <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™ applications</li> </ul>

Specifications subject to change without notice.

## When Nothing Else Works

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To place an order, please contact your account manager.  
For more information, email [sales@trellisware.com](mailto:sales@trellisware.com)

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