



# Simplify Your TSM Integration



## TW GHOST 880 EMBEDDED MODULE

The TW Ghost 880 Embedded Module is a Software-Defined Radio (SDR) that 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.

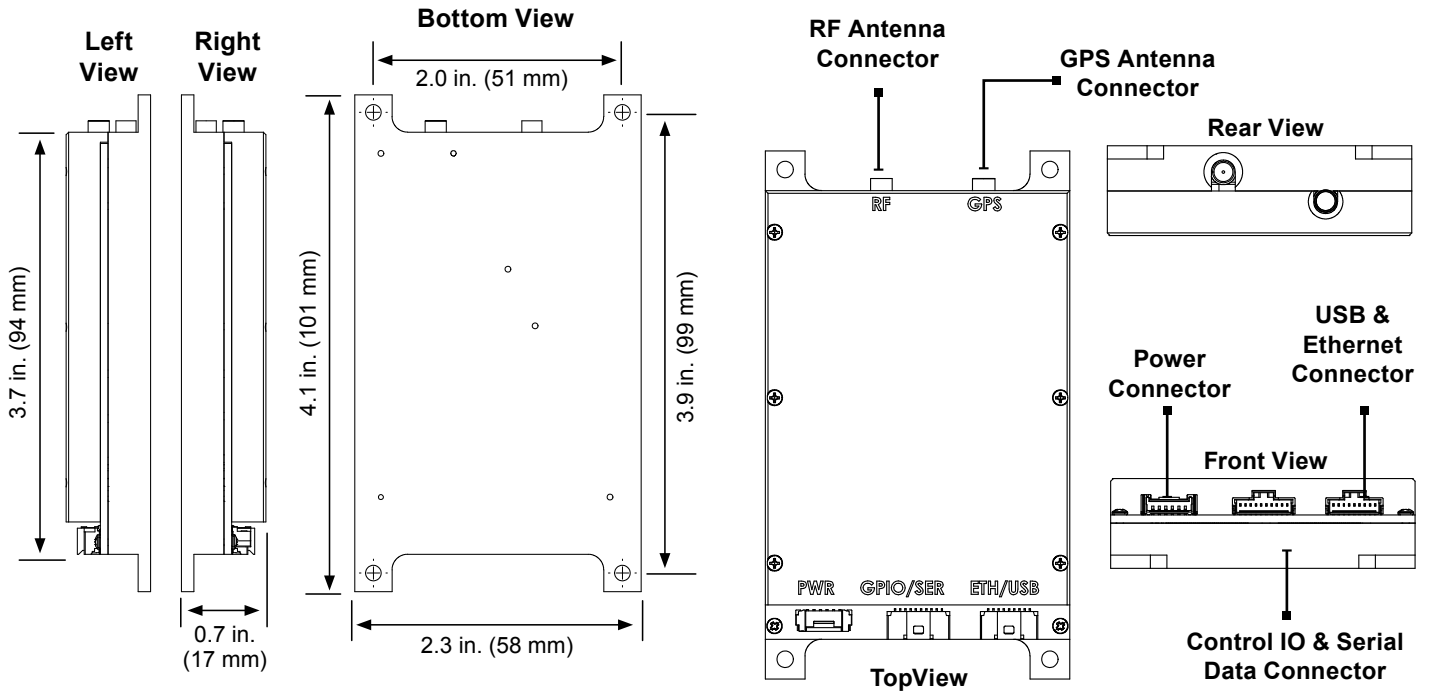
### KEY FEATURES

- Smallest, lightest, and most capable SDR for plug and play integration of the TrellisWare TSM waveform.
- Includes Ethernet, Serial, and USB data interfaces to support transmission of command and control (C2) communications, status, and payload data over the TSM network.
- Requires minimal integration effort, significantly reducing non-recurring engineering costs and time to market
- 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.

### 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.





Specifications	
<b>Overall Size</b>	4.1 L x 2.3 W x 0.7 H in (101 x 58 x 17 mm)
<b>Weight</b>	0.3 lbs (130 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>	Throughputs of 50+ Mbps supported
<b>Security</b>	Built-in AES-256 COMSEC TRANSEC
<b>Environmental</b>	MIL-STD-810G, IP41
<b>Operating Temperature Range</b>	-20°C to +55°C (-4°F to +131°F)
<b>Waveform</b>	<ul style="list-style-type: none"> <li>TSM               <ul style="list-style-type: none"> <li>Barrage Beamforming (optional)</li> </ul> </li> <li>NB LOS</li> <li>Katana NB (optional)</li> </ul>

Networking	
<b>Network Coverage</b>	<ul style="list-style-type: none"> <li>Barrage Relay</li> <li>Multi-hop – 205 miles (330 km) per hop</li> <li>Hosts multiple waveforms</li> <li>Robust in Harsh RF Environments</li> <li>Throughputs of 50+ Mbps supported</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>	AES-256 (FIPS 197)
<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 3rd 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**  
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](mailto:sales@trellisware.com)

Please access the most recent digital version of this datasheet on the TrellisWare Customer Support Site (site registration required).  
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