

TrellisWare TW-600 Ocelot

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TrellisWare TSM™ Module for Embedded Integration



TW-600 Ocelot is a module built for integration into hardware platforms and network systems. It provides reliable connectivity for tactical mobile ad-hoc networking. With optimal size, weight, and power, Ocelot is ideal for fitting into tight spaces.

Ocelot is a flexible communications solution for unmanned systems, ISR missions, security systems, or mining operations. It provides pin-header interfaces for analog audio, USB data, and module control, as well as simultaneous voice, data, and Position Location Information (PLI). Ocelot has the ability to act as a network relay to send and receive data.

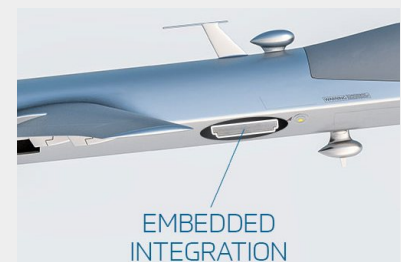
Any system that embeds Ocelot gains the advantage of TrellisWare's highly scalable and robust TSM wireless mesh network. This self-forming, self-healing infrastructureless mobile network delivers reliable communications in harsh RF environments, critical situations, or during unexpected networking challenges.

TSM Benefits

- ✓ Infrastructure-less MANET
- ✓ High-speed wireless IP networking
- ✓ Self-forming, self-healing
- ✓ Scalable to 200+ nodes
- ✓ Robust in harsh environments
- ✓ Non-routing network

Module for easy integration into other equipment

With optimal size, weight, and power, the Ocelot module provides robust networking and flexible beyond line of sight communication capabilities — all in a cost effective, low-profile package.





Network relay to send and receive IP data

The Ocelot module opens up network possibilities as it acts as a network relay to send and receive IP data. The module is equipped with power, status, and control interfaces; audio, data, and software interfaces; and RF and GPS antenna connectors.

Optimal size for custom platforms

The Ocelot Integration Platform accessory converts pin header interfaces into common interfaces and controls for embedding communications and IP data flow in custom platforms.

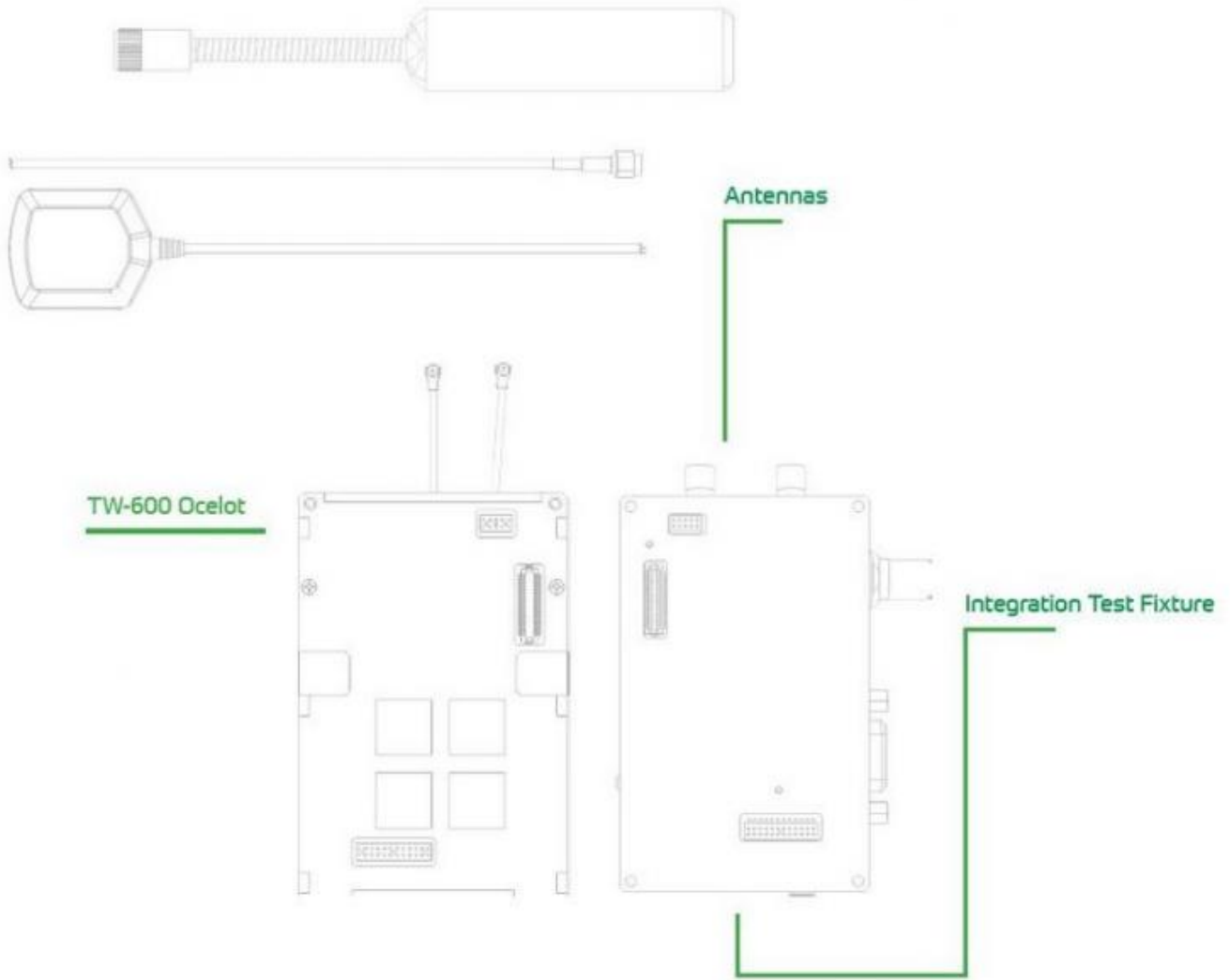


[AT Communication ©](#)

The Ocelot module is an example of a commercially custom platform for embedding into another form-factor. TrellisWare offers custom networking solutions and will work with you to reach your desired form-factor.

TW-600 Ocelot Specifications

Size	3.37" (H) x 2.12" (W) x 0.54" (D)
Weight (R/T only)	3 oz
Frequency Range	1775–1815 MHz, 2200–2250 MHz
Occupied Bandwidth	20 MHz, Configurable to 4 MHz
Transmit Power	2 W
Input Power	3.0–4.2 V DC
Environmental	MIL-STD-810G
Water Resistant	Splash Proof
Connectors	Board Mount, Power and Control, Audio, Data Interfaces, U.FL RF Antenna, U.FL GPS Antenna
Data Rate	8 Mbps IP Throughput per Channel
Audio Encoding	AMR 5.9 or MELPe
Audio Latency	3 Hop < 275 ms; 8 Hop < 400 ms
Net Entry Time	< 1 Second
Waveform	TSM
Routing	Barrage Relay™ networking
Modulation	Constant Envelope



Common TSM Networking

Network Coverage	Mobile Ad-hoc Networking (MANET)
	Range – 26 Mile LOS per Network Hop
	Multi-hop – Up to 8 Hops
	200+ Nodes in a Single RF Channel
	Robust in Harsh RF Environments
Communication Services	Simultaneous Voice, Data, PLI
	12+ Cellular Quality Voice Channels
	Up to 12 Real-time Video Streams
	Built-in GPS
	IP Support – IPv4, IPv6; Unicast, Multicast, Broadcast; TCP, UDP
Security	AES-256
	OTAR, OTAZ
	Remote Disable
	RSA-2048
	SHA-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

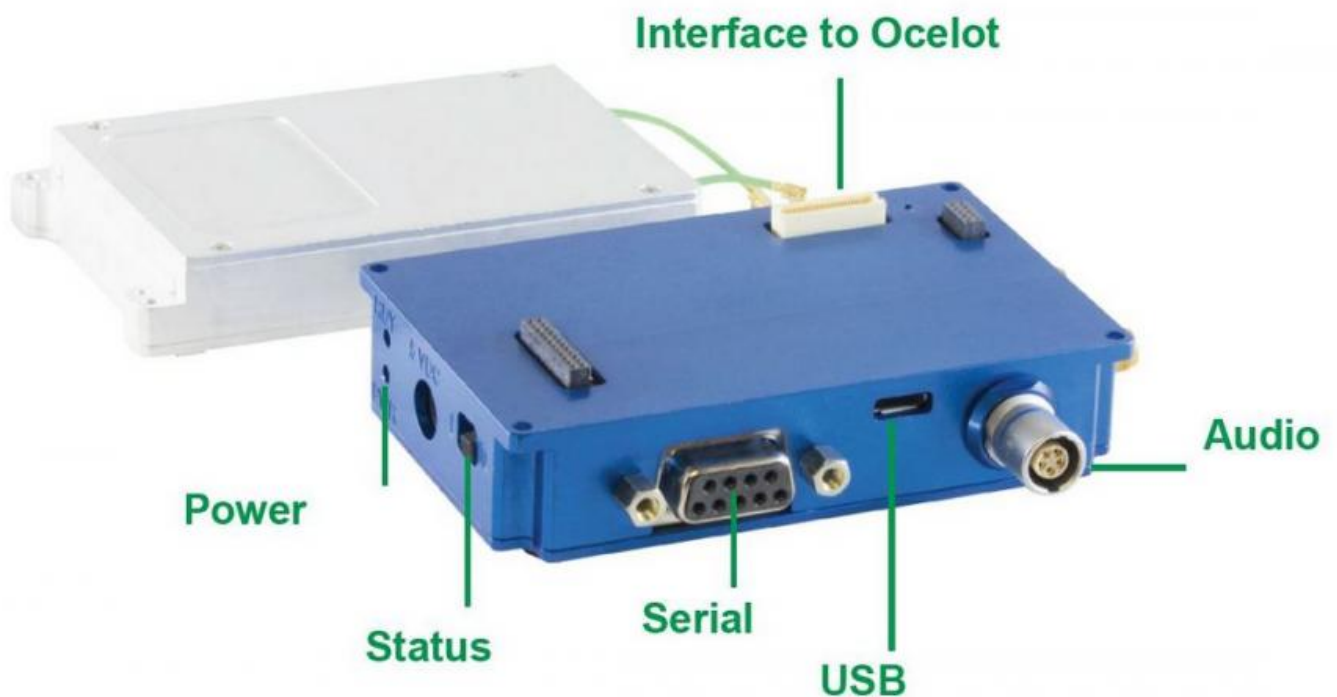
- ✓ Integrates with other equipment and existing systems

- ✓ Use for unmanned systems, ISR, M2M, security , or mining operations
- ✓ Acts as a network relay to send and receive IP data
- ✓ Its small size easily fits into custom or tight fitting platforms
- ✓ Operates with other TSM products



TW-2600 Integration Platform

The Ocelot Integration Platform converts the Ocelot's pin-header interfaces into common interfaces and controls, allowing developers to jump-start their integration process



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