TrellisWare Announces Product Enhancements to its family of Software Defined Radios

SAN DIEGO, CA, UNITED STATES, May 5, 2025 /EINPresswire.com/ -- [TrellisWare](#) Technologies, Inc. announced today the upcoming release of waveform and software improvements to its family of Software Defined Radios (SDRs). TrellisWare's TSP 1.2 software version brings many powerful new features and upgrades to enhance the user experience and boost communications capabilities. The updated software provides new TSM® and Katana™ waveform features and major enhancements to TrellisWare software applications.

> " These developments reflect our continued investment and commitment to supporting our customers with the industry's most capable and forward-looking SDR solutions."
>
> *Marcus Urie, Sr. Director of Product Management*

TrellisWare's latest software release, TSP 1.2, provides the following key enhancements:

Introduction of TrellisWare's Barrage™ Beamforming for TSM®
o The new Barrage Beamforming option for TrellisWare's TSM waveform is a form of distributed beamforming that enables increased receive signal power at the desired destination.
o Provides substantial benefits, including enhanced coverage, data rates, and reliability across various operational environments and use cases.
o TrellisWare's patent-protected technology represents the industry's first-ever commercial implementation of distributed beamforming technology,

New Katana Features
o Dual talk group monitoring - Empowers users to stay connected to two talk groups simultaneously, one for active transmission and the other for real-time voice monitoring, offering greater situational awareness without switching talk groups.
o Multiple data channel support - Enables seamless data exchange across multiple subnets within a supernet. Users can access and communicate over any supported data channel in the preset, improving flexibility and mission coordination.

Improved multi-waveform support in TrellisWare Network Controller (TNC) and Software

Download Tool
o Ability to show waveform versions installed on a radio and in the TrellisWare software package.

Wi-Fi Improvements
o Radios hosting a Wi-Fi network with a TW-1760 Wi-Fi adapter now supports the 5 GHz Wi-Fi band and have Automatic Channel Selection (ACS) enabled by default.
o These added capabilities improve users' ability to connect to a radio's Wi-Fi network in crowded environments.

In addition to TSP version 1.2, TrellisWare is also developing the following new waveforms and features for near-term release:
Anti-Jam Wideband Mobile Ad Hoc Network (MANET) (beta release available soon for select customers)
o A frequency hopping MANET that provides voice, position location information (PLI) and IP data (video, chats, file transfer) communications in harsh RF environments.
o Supports frequency hopping across the full spectrum on TrellisWare radios (UHF, L-band, and S-band), allowing for reliable network communications even in the presence of jammers and other forms of heavy RF congestion.
o Adding this waveform to TrellisWare's portfolio of TSM, Katana, and analog AM/FM provides a full tactical communications PACE plan in a single TrellisWare radio.

Anti-Jam Waveform for Uncrewed Systems now available for demonstration
o Supports reliable command and control (C2) of Uncrewed Systems with an anti-jam C2 link alongside a high throughput downlink for video, sensor data, and telemetry, with the lowest latency system performance in the industry.

Built-in VPN support for secure network connectivity via the cloud (beta release available soon)
o TrellisWare radios with the built-in VPN feature can facilitate the secure bridging of multiple TSM networks via the cloud.
o Allows radios in different TSM networks scattered across the world to securely communicate with voice and share IP data and PLI as if they were operating in the same TSM network.

"With multiple major software releases each year, TrellisWare consistently provides innovative new waveforms and features to meet the most challenging communication needs our of customers," said Marcus Urie, senior director of product management at TrellisWare. "TSP 1.2

continues this tradition with the introduction of Barrage Beamforming, a revolutionary new technology for providing users with enhanced range, throughput, and reliability in the most demanding environments. The beta release and demonstration of TrellisWare's new anti-jam wideband MANET and uncrewed systems waveforms enables customers to preview the unmatched performance of these new capabilities in highly contested operational situations. These developments reflect our continued investment and commitment to supporting our customers with the industry's most capable and forward-looking SDR solutions."

"Our commitment to continuous improvement and user satisfaction drives us to continually refine our resilient communications solutions," added Nick Guiffrida, senior radio/platform software product manager. "With TSP version 1.2, TrellisWare is focused on pursuing the latest technological innovations to deliver a more intuitive experience and offer enhanced features that empower our users to achieve improved interoperability."

If you will be attending SOF Week in Tampa from May 6-8, please contact sales@trellisware.com to schedule a meeting to learn more about TrellisWare TSP 1.2 waveform and software upgrade.

TrellisWare's TSP 1.2 waveform and software upgrade will be available soon on the TrellisWare Customer Support Site (registration required). To find out more and request a demo, please contact sales@trellisware.com.

Tina Bachman
TrellisWare Technologies, Inc.
tbachman@trellisware.com
Visit us on social media:
LinkedIn
Instagram