PacStar®
Imagined. Engineered. Delivered.™

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CURTISS-WRIGHT

PacStar 463 RoIP / Voice Module

PacStar 463 RoIP / Voice Module

PacStar 463 extends and integrates remote LMR radio networks into IP based networks, enabling organizations to benefit from the best capabilities of each

PacStar 463 provides LMR-to-IP data conversion, interoperability between different radio types, radio cross-banding, and remote radio control over IP, in a small form factor, rugged module.

When combined with other PacStar 400-Series modules, PacStar 463 will bridge gaps between IP-based communications networks and LMR tactical radio networks – providing comprehensive, tactical, and mobile interoperability solutions.

PacStar 463 supports up to four radio networks simultaneously. It converts E&M signals to IP, and provides cross-banding and radio control through industry standard RJ45 and RS-232 interfaces.

PacStar 463 is based on proven, software defined technology adapted from SCI TOCNET G4 – deployed in thousands of systems and over 50 major defense programs.

PacStar 463 includes support for TOCNET user access technologies, and interoperates with the extensive family of TOCNET radio switches, dispatching solutions, and peripherals.

The module provides high quality voice and gateway services including analog (voice and PTT) audio and IP voice control and networking. The all-in-one solution includes:

- Radio and intercom switching
- SIP and H.323 controllers
- Interoperability with any IP-based network

PacStar 463 is designed to work standalone, or in conjunction with other PacStar 400-Series communications modules serving the tactical and expeditionary communications needs of teams that deploy worldwide in austere environments. PacStar 463 enables teams from U.S. DoD, Homeland Security, first responders, and civilian organizations to easily and securely connect multiple devices to mission critical communications networks.

Key Features

- **Based on proven technology** from SCI TOCNET G4
- **Provides 4-wire RJ45 E&M circuits** to support PTT for up to 4 radios
- **Provides 4 RS-232 radio control interfaces**
- **Integrated smart power supply** that runs on tactical radio batteries, wide range DC input and worldwide AC input
- **Snap-together design** enables quick expansion with other PacStar 400-Series products
- **KG-250X/XS compatible power output port**
- **Compact design** for flexible packing and transport
- **Extended temperature range,** and fanless design improves reliability and uptime
- **Continuous runtime** with hot-swappable batteries
- **Small, but powerful;** only 5.3" x 7.1" x 1.6" and 2.5 lbs.

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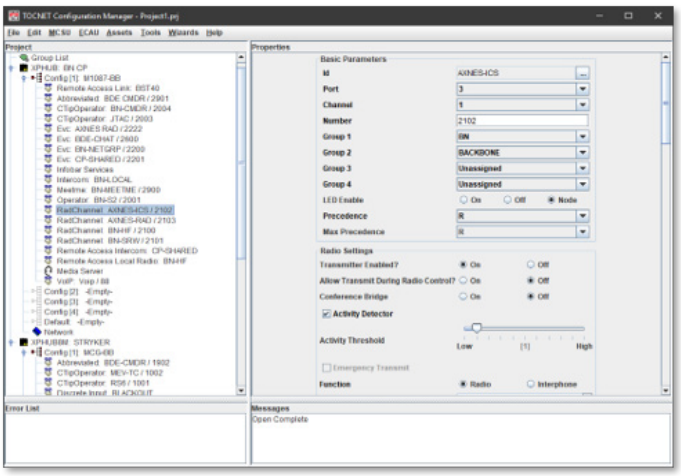
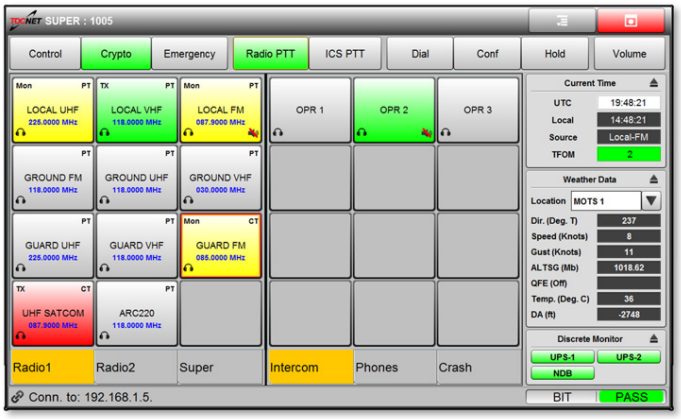
GUI-based TOCNET Configuration Manager



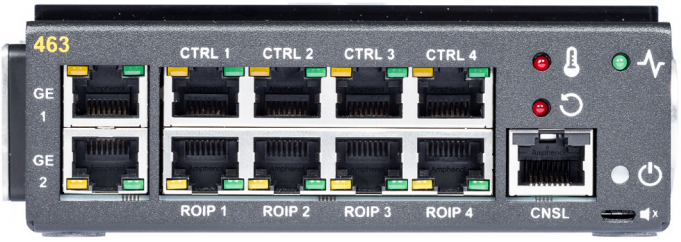
- GUI for creating and modifying TOCNET® system configurations
- Included in the base system
- Platform independent (runs on Windows, Linux, etc.)
- Functions in a standalone mode or while connected to a TOCNET® system
- Enables creation / modification of configs from a remote location
- Visual Tool Box for creating configurations
- Automated configuration and guided/instructional processes
- Software upgrade and version management (system wide)

GUI-based TOCNET Soft CAU



- GUI for managing radio use/control, voice, conferencing, talk groups, etc.
- Optional software package, reduces costs compared to using WAVE
- Platform independent (runs on Windows, Linux, etc.)
- Measured PESQ / MOS scores above 4.0 for superior IP voice quality
- Operates anywhere on the network with IP connectivity to PacStar 463 or other TOCNET hubs
- Android™ version for mobile applications, dismounted ability to manage radio/voice network.
  - Aligns with Nett Warrior, JBC-P programs
  - Provides increased mobility, eliminates tethered connection

TOCNET Web Services



- Included in base system
- Provides industry standard interface for remote access, monitoring and control through API
- Soap/XML based schemas that are VICTORY compliant
- Establishes mechanism for integrating voice services with COE/COP or SA software
- Rapid task ordering for platform operator and comms assets without pre-configuration
- Voice services include VoIP, radio bridging/cross banding, conferencing, etc.
- Automation of cross band / bridge management including PACE execution based on user defined rule set
- Promotes the creation of a network "buddy list" of users and radios across the battlefield
- Reduces system complexity and user's cognitive load through the integration of voice with SA

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IP Voice Interoperability

- Interoperability: Cisco UCM & CME, WAVE, WIN-T, H.323, and SIP
- Codecs: G.711, G.726, G.729, MSADPCM, MELPe, CVSD

Radio Interoperability

- 4 E&M channels with PTT
- Radio control/radio relay/radio cross banding/radio conferencing
- Remote radio control/management: ARC-220, ARC-231, PRC-117F, PRC-117G, PRC-148 MBTR, PRC-148 JEM, PRC-150, PRC-152, PRC-152A, PRC-154, PRC-155, PRC-158, PSC-5D, and SINCGARS
- Integrated/interoperable with TSM, LTE, Iridium Next, MANET
- Supports advanced capabilities for current SRW, WNW, MUOS capable radios
- Enables PACE through remote monitoring of radio nets

Power Specifications

- Battery snap-together connectors for 1-2 each AN/PRC-152/148 snap-on radio batteries; hot swappable with 2+ hours runtime per battery
- Wide range DC input, 10-35V
- Worldwide AC power input (with adapter cable)
- Power draw: Nominal 30 watts total

Connectors

- 4 analog radio (E&M) interface ports (RJ45)
- 4 RS-232 radio control ports (RJ45)
- 2 GigE networking ports, 1 RS-232 maintenance port
- Wide range DC input
- 12V DC output connector, KG-250X/XS compatible
- Radio battery and PacStar 400-Series power snap-together connector

Physical Specifications

- Dimensions 5.3″ x 7.1″ x 1.6″
- Weight 2.5 lbs.
- Snap-together connector provides DC pass-through for powering additional PacStar 400-Series products
- Fanless design for quiet operation, higher reliability, and low power draw
- Operational temperature -20C to 60C
- Tested to MIL-STD 810