

PacStar Secure Wireless Command Post (TLS)



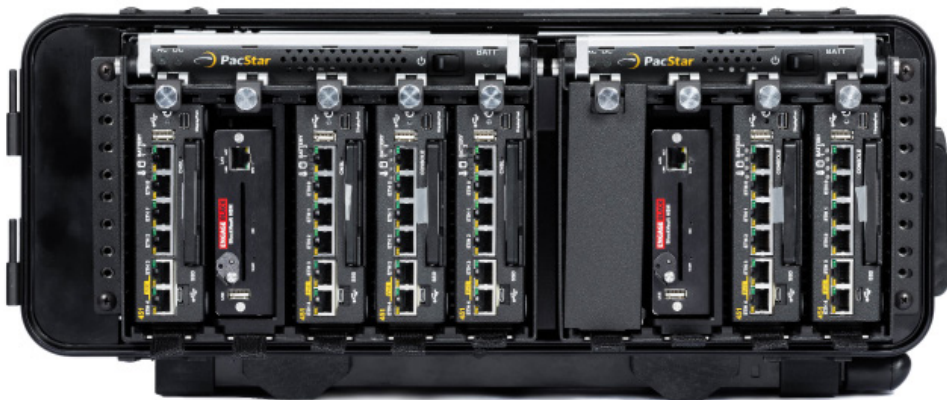
PacStar Secure Wireless Command Post (TLS)

PacStar Secure Wireless Command Post (TLS) is a small modular communications package that enables wireless and mobility for Android-based COTS smart phones and tablets for classified networks in deployed, expeditionary and tactical environments.

The system is designed for use in Commercial Solutions for Classified (CSfC) Mobile Access Capability Package (MACP) v2.0 solutions. It enables end user devices to utilize built-in commercial Wi-Fi and LTE/Cellular radios without the need for complex, proprietary virtualization software. End user devices that connect to Secure Wireless Command Post (TLS) use VPN client software providing an outer IPsec tunnel, and a TLS encryption software library providing an inner layer of encryption. The system supports TCP/IP and UDP protocols as well as multicast – supporting data, voice and video applications. This design eliminates the need for custom phone operating systems or additional hardware devices required in many MACP architectures.

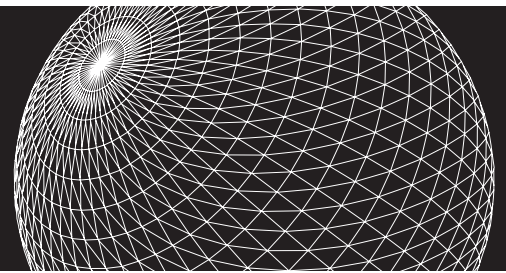
PacStar Secure Wireless Command Post (TLS) as shown provides transport for access to a single classified network. The solution is configurable (with additional equipment) to provide transport for multiple classified networks (including networks of different levels of classification up to Top Secret) over a single wireless infrastructure. The system is wireless infrastructure agnostic and can work over any radio type without additional accreditation and certification.

Secure Wireless Command Post (TLS) is based on PacStar 400-Series small form factor platform. The PacStar 400-Series modular platform is designed to maximize capabilities with the smallest SWaP possible for command post, fly-away, ground vehicle and aircraft-based use cases. The system is customizable and configurable for use in other CSfC capability packages including the Wireless LAN CP and the Multisite Connectivity CP. It can also be configured to optimally serve a wide range of team sizes, and can also be customized with additional software and NFV solutions to ensure interoperability with existing customer infrastructure.



Key Features

- **Secure, converged, high-speed, PKI enabled encryption** infrastructure capable of transmitting classified information, including multiple classified networks up to Top Secret
- **Complete, standalone system including all CSfC cybersecurity components** (PKI, VPN, Authentication Systems, TLS protected server, Firewalls, IDS, etc.) necessary to meet NSA CSfC recommendations
- **Includes technologies listed on CSfC component list**, eliminating the need for deviations
- **Supports Android end user devices with one layer of IPsec and one layer of TLS encryption** – no virtualization required, and no retransmission device required to attach to government networks
- **Expandable/modular system** may be customized with added networks or alternative component technologies
- **Based on rugged, MIL-STD tested, PacStar 400-Series modules and packages** that optimize SWaP and maximize deployment flexibility
- **Managed by PacStar IQ-Core[®] Crypto Manager**, providing CSfC-specific capabilities including PKI management, digital certificates and VPNs in accordance with government requirements



SOLUTION CONTENTS

Secure Wireless Command Post (TLS) can be **tailored to customer-specific requirements**. LTE/Cellular or Wi-Fi radio infrastructure requires additional equipment. Base configuration includes:

Red Network

- PacStar 451 TLS protected server (Bivio TLS protected server and Perspecta Labs SecureIO Gateway)
- PacStar 451 Red Firewall/IDS (Palo Alto VM)
- PacStar 451 Management (IQ-Core Software, Domain Services, Certificate Authority/CDP, NTP Server)
- PacStar 413 HSM (Engage Black, Black Vault HSM)

Gray Network

- PacStar 451 VPN Gateway (Aruba VMC)
- PacStar 451 Gray Firewall/IDS (Palo Alto VM)
- PacStar 451 Management (IQ-Core Software, Domain Services, Certificate Authority/CDP, NTP Server)
- PacStar 413 HSM (Engage Black, Black Vault HSM)

Black Network

- PacStar 451 Outer Firewall (Palo Alto VM or Cisco ASA)

PACSTAR 400-SERIES MODULES

Key Features

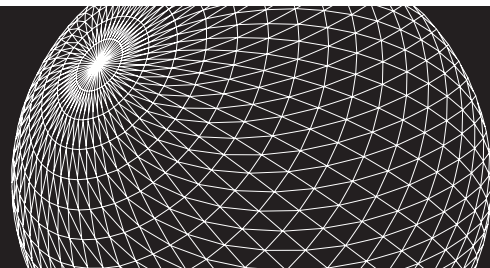
- Dimensions: 5.3" x 7.1" x 1.6" (Each)
- Weight: ~2.45 lbs. (Each)
- Snap-together connectors provide DC pass-through for powering additional PacStar 400-series products
- Fanless design for quiet operation, higher reliability, and low power draw
- Operational temperature -20C to 70C
- Extensively tested: MIL-STD 810G, MIL-STD-461 and MIL-STD-704D
- Battery snap-together connectors for 1 or 2 AN/PRC-148 radio batteries; hot swappable with 5+ hours runtime per battery
- Wide range DC input, 10-36 V DC
- World-wide AC power input (with adapter cable)
- PoE power output: Up to 10 watts available PoE power on AC or DC input
- Power draw: Nominal 10 to 45 watts per module, depending on module type



PacStar 451 Small Server Module



PacStar 413 HSM Sled



SYSTEM PACKAGING

Physical Specifications

Included in a PacStar Mini-Transit Case, with a payload of up to (9) modules, provides a transportable infrastructure for housing and operating PacStar 400-series Smart Chassis and modules.

- Custom designed carbon fiber transit case with wheels and handle (9" x 21" x 14")
- Meets FAA maximum carry-on bag size restrictions
- Holds multiple Smart Chassis with a maximum (9) module payload - e.g. (1) 4-slot and (1) 5-slot Smart Chassis
- Removable lids for operation of equipment in the transit case
- Smart Chassis are user removable and capable of operating outside the transit case; enabling physical separation as required for classified enclaves
- Overall system weight ~65 lbs.

Secure Wireless Command Post (TLS) is also available in PacStar Rack Mount Frame and other configurations ideal for ground vehicle and airframe mounted use cases including networking on the move, and networking en route.

System Power Specifications

- Total power draw, approximately 230 watts
- Includes an integrated power system
- World-wide AC input, 47 - 63 Hz, 85 V - 264 V
- Wide range DC input, 10 - 36 V DC
- Includes an integrated UPS based on the DoD standard 2590 Li-Ion rechargeable battery
- 200 watt-hours rated
- Automatically auto-senses and switches to battery if prime power is interrupted
- User accessible battery compartment
- LED indicators for battery status



PacStar systems including this product may be covered by one or more of the following US patents: #8,654,749, #7,817,589, #8,270,325, #9,160,619, #9,225,102. Additional patent(s) pending. See www.pacstar.com/patents for details.