PacStar 451 SSV with Aruba VMC (Virtual Mobility Controller)

The PacStar 451 Small Server Module provides a high performance virtualization platform for hosting software applications in a compact, quick setup, rugged form factor. Designed for in-theater communications, executive communications, vehicle-mount, entry or forward operating base deployments for military, Homeland Security, first responders and commercial/enterprise users. The PacStar 451 meets size, weight and power requirements unmatched by other COTS appliances.

The PacStar 451 with Aruba VMC is a small form factor, ruggedized network controller providing the following services:

- Secure network transport with IPSec gateway services
- Network boundary production with integrated firewall, threat management and content filtering
- Aruba wireless access point and wireless intrusion prevention system management
- Policy-based routing

The PacStar 451 with Aruba VMC can provide one layer of encryption for “Commercial Solutions for Classified” (CSfC) solutions for VPN-based wired and wireless transport of classified information over WAN, LAN and WLAN links. Configured correctly, the unit enables classified communication over untrusted SATCOM, WiFi, Hotel and Cellular infrastructures.

The PacStar 451 is certified by Aruba Networks as a supported platform for the VMC. It is currently undergoing Common Criteria certification as an appliance and is listed on the NSA CSfC components list as both “IPSec VPN Gateway” and “Traffic Filtering Firewall.”

The PacStar 451 utilizes the latest Intel 4th generation Core i5 processing platform. The physical package utilizes the PacStar 400-series standard module footprint and offers the best in small size, flexible power, and environmental ruggedness.

PacStar offers a wide array of system packaging options for the PacStar 400-series, including brief-case style, transit case-style and backpack-style transport options.

**KEY FEATURES**

- Provides extensive network control capabilities similar to the Aruba Networks 7000 Series Cloud Services Controller
- Ideal for serving as tactical IPSec VPN gateway and Traffic Filtering Firewall for CSfC capability packages, including VPN CP and MA CP
- Intel 4th generation Core i5 processing platform
- Integrated smart power supply that runs on tactical radio batteries, wide range DC input and worldwide AC
- Snap-together design enables quick expansion with other PacStar 400-series products
- 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 1.7” and 2.7 lbs.

**ARUBA VMC (Virtual Mobility Controller) Capabilities**

- Advanced Cryptography (ARC) module

with Suite B support

- Virtual Intranet Access™ (VIA) client with IPSec/SSL VPN support
- Policy Enforcement Firewall™ with deep packet inspection, application awareness, identity controls, and user-based application policy enforcement and prioritization
- Integrated threat protection with rogue AP containment and spectrum analyzer
- Web content policy and reputation control
- Adaptive Radio Management that optimized WLAN points

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ARUBA VMC (CONTINUED)

Performance*
• Up to 512 concurrent users
• Up to 512 concurrent IPSec/GRE/SSL tunnels
• Up to 4,096 VLANS
• Up to 8,192 active firewall sessions
• Up to 1Gbps wired IPSec firewall throughput
• Up to 500Mbps WLAN firewall throughput

PACSTAR 451 SMALL SERVER PLATFORM
Processor
• Intel 4th generation (Haswell) Core i5, dual-core

Other System Specifications
• 16 GB DDRIII SO-DIMM
• (2) disk drive options available, SATA 6Gb/s
  ◦ User removable dual 1.8” SSD, up to 1 TB total
  ◦ User removable single 2.5” SSD (7 mm), up to 1 TB total

User I/O
• (2) RJ-45 GB Ethernet ports
• (1) RS-232 serial RJ-45 console port
• DisplayPort video output (diagnostics)
• (1) USB 2.0 Port
• (1) USB 2.0/ESATA Port
• Wide range DC input (10 – 36 VDC)
• 12V DC output to operate additional user devices
• Radio battery and PacStar 400-series power snap-together connector

Physical Specifications
• Dimensions 5.3” x 7.1” x 1.7”
• Weight 2.7 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 810G (Temperature, Vibration, Shock, Sand and Dust, Humidity)
• Tested to FCC 47 Part 15B Class A (Radiated and Conducted Emissions)

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, 10-36V
• World-wide AC power input (with adapter cable)
• Regulated clean 12V DC output, 20 watts
• Nominal power draw: 25 watts

*Performance numbers are based on initial Aruba testing and may be updated in the future.