

PacStar 448 Small 10 GigE Switch Module

PacStar 448 provides high-density and “top-of-rack” applications at 10 Gigabit speeds supporting storage replication and workload mobility for hyper-converged infrastructure, cloud replication, and high-speed, low latency network interconnect

PacStar 448 enables networking for a wide variety of edge-based C5ISR, sensor, IoT, computing, and storage applications. It connects multiple applications and storage servers to ensure high availability and access to large quantities of mission-critical data in disconnected, intermittent, and limited (DIL) environments.

PacStar 448 is ideal for use in environments requiring specialized form factor, size, weight, power, port density, and ruggedized compute and storage needs. Designed from the ground up to provide flexible deployment, configuration and setup options, PacStar 448 can be used as follows:

- As a standalone switch module
- To provide high-speed switching infrastructure between servers and storage devices performing data intensive tasks in tactical and expeditionary settings
- Included in a modular, flexible system comprised of PacStar 400-Series modules, mounted in a variety of packaging and transport options

The module integrates seamlessly with other PacStar 400-Series standard small form factor modules, providing the best in small size, flexible power, and environmental ruggedness. PacStar also offers a wide array of system packaging options for PacStar 400-Series, including briefcase, transit case, rack mount, vehicle mount, and backpack transport.



Key Features

- **Based on Cisco ESS 9300** with 10 GigE SFP+ ports
- **Industry-leading size, weight, and power (SWaP)** provides customers maximum flexibility when integrating into programs where mobility and deployment speeds are critical
- **Extensively tested** to MIL-STD-810 by independent labs (pending). Reports available on request. For more information, see: pacstar.com/testing/
- **Integrated smart power supply** that runs on and recharges tactical radio batteries, wide-range DC input and worldwide AC input
- **Patented, compact snap-together design** enables quick expansion with other PacStar 400-Series modules and packaging solutions
- **Optionally managed by IQ-Core® Software** for easy setup and configuration
- **Continuous runtime** with hot-swappable batteries
- **Small, but powerful;** only 5.3" x 7.0" x 1.6" and 2.5 lbs.
- **Zeroize button** (reset to factory configuration)
- **Cisco LAN base standard**

Networking Capabilities

- (10) Ethernet ports total
- Layer 2 switching - IEEE 802.1, 802.3 standard, VTPv2, NTP, UDLD, CDP, LLDP, unicast MAC filter
- Less than 4.6µs latency (RFC2544)
- Security - SCP, SSHv2, SNMPv3, TACACS+, RADIUS server/client, MAC address notification, BPDU Guard, SPAN session, port security, DHCP snooping, dynamic ARP inspection, IP Source Guard, 802.1x, guest VLAN, MAC authentication bypass, 802.1x multi-domain authentication, storm control, trust boundary
- Multicast - IGMPv1, v2, v3 snooping, IGMP filtering, IGMP querier
- Management - web device manager, MIB, SmartPort, SNMP, syslog
- Quality of Service - ingress policing, rate limit, egress queuing/shaping, AutoQoS
- IPv6 host support, HTTP over IPv6, SNMP over IPv6
- IPv4 static routing

Connectors

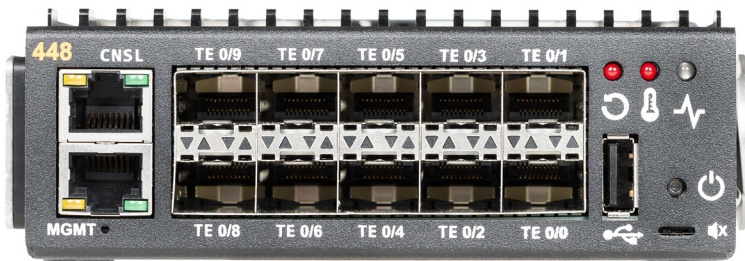
- (10) SFP+ 10G ports
- (1) RS-232 console port
- (1) USB full size port
- Wide range DC input
- 12V DC output connector, KG-250X/XS compatible
- Radio battery and PacStar 400-Series power snap-together connector
- MicroSD card slot for input/export/storage of configurations

Physical Specifications

- Dimensions 5.3" x 7.0" x 1.6"
- Weight 2.5 lbs.
- Patented snap-together connector provides DC pass-through for powering additional PacStar 400-Series modules
- Operational temperature -20C to 60C (TBR)
- Extensively tested to MIL-STD-810 by independent labs. (pending). Reports available on request. For more information, see: pacstar.com/testing/
- Includes zeroize button and over-temperature indicator

Power Specifications

- Battery snap-together connectors for 2 each AN/PRC-152/148 snap on radio batteries; hot-swappable with up to 2+ hours runtime per battery. Includes battery recharging, dead battery recovery, and low battery alarm
- Wide range DC input, 10-35V
- Worldwide AC power input (with adapter cable)
- Regulated clean 12V DC output, 25 watts (supports devices such as KG-X/XS or KG-175D)
- Power draw:
 - Nominal 18 watts total (without SFPs)
 - Max 33 watts total (with up to (10) 1.5 watt SFPs)



PacStar products are covered by multiple patents. Additional patent(s) pending. See www.pacstar.com/patents for details.

