CURTISS-WRIGHT

PacStar 447 Small Router Module with Cisco ESR 6300

PacStar 447 provides high-performance routing, switching and advanced network access for critical voice, data, and video connectivity in a compact, quick setup, rugged form factor

PacStar 447 is based on Cisco® Embedded Services Router (ESR) 6300 and provides 2 GigE (SFP or RJ45) WAN ports and 4 GigE RJ45 ports of PoE LAN access.

Designed from the ground up to provide flexible transport, configuration and setup options, PacStar 447 can be used as follows:

- Included as part of modular, flexible systems with other PacStar 400-Series modules, mounted in a variety of cases and packaging solutions

- In snap-together configurations with other PacStar 400-Series modules including switches, servers, and gateways

- Used as a standalone router/switch module

PacStar 447 is designed to serve the tactical communication needs of teams that deploy worldwide and have secure communication requirements in austere environments. PacStar 447 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.

PacStar 447 is optionally managed by PacStar IQ-Core® Software, which simplifies system setup, network management and protects the system from misconfiguration by operators in the field.

Key Features

- **Based on Cisco ESR 6300** routing/switching module with (6) Gigabit Ethernet ports

- **Integrated smart power supply** that runs on tactical radio batteries, wide-range DC input and worldwide AC input

- **Compact, snap-together design** enables quick expansion with other PacStar 400-Series modules and packaging solutions

- **PoE output**

- **KG-250X/XS compatible power output port**

- **Extended temperature range and fanless design** improves reliability and uptime

- **Continuous runtime** with hot-swappable batteries

- **Built-in battery recharger**

- **Small, but powerful;** only 5.3" x 7.1" x 1.6" and 2.4 lbs

- **Zeroize Button** (Reset to factory configuration)

- **Available with Cisco IOS-XE** (Network Essentials or Network Advantage) with 50 Mbps, 250 Mbps, or Boost (350 Mbps) licenses

- **Suite-B (CSfC) cryptography** with up to 350 Mbps IPsec throughput with Boost license

Hardware Specifications
- 4-GB DDR4 RAM
- 4-GB eMMC flash storage

Software Specifications
- Cisco IOS XE software
- Available technology packages: Network Essentials and Network Advantage
- Various throughput performance licenses are available:
  ◦ 50 Mbps encrypted (Default license)
  ◦ 250 Mbps encrypted (Performance license)
  ◦ 350 Mbps encrypted (Boost license)

Networking Capabilities
- (6) ports: (2) routed and (4) switched
- Cisco IOS Service Advertisement Framework (SAF)
- MLD proxy
- Routing protocols - RIP, RIPv2, OSPF, EIGRP, BGP, CPD, IP policy routing, IP Multicast (PIM) v1 and v2, IGMP v1 and v2, IP multicast load splitting, Cisco GMP
- Up to 32 VLANs supported per router
- IPv6 - IPv6 routing, IPv6 QoS, IPv6 tunneling support, Cisco IOS Zone-Based Firewall for IPv6 traffic
- Encapsulations - PPP, PPPoE client and server for Fast Ethernet, 802.1q VLAN trunking support and GRE
- Additional protocol support - Telnet, asynchronous tunneling, Real-time Transport Protocol (RTP) header compression
- Extensive support for radio-aware routing and mobile IP
- Suite-B support cryptography
- Group Encrypted Transport VPN, Dynamic Multipoint VPN (DMVPN), or Enhanced Easy VPN
- Integrated threat control - IOS firewall, zone-based firewall, IPS, content filtering and Flexible Packet Matching (FPM)
- Extensive security protocols – IPSEC, SSHv2, SSL/TLS, SRTP, AES, IKE
- Traffic management – QoS, generic traffic shaping, 802.1p CoS, WRED, CBWFQ, LLQ, priority queuing and RSVP
- Management services - SNMP v2 and v3, RADIUS, TACACS+, Syslog, TFTP, DHCP, HSRP and more
- Cisco Unified Communications Manager Express support

Connectors
- (6) Ports total
  ◦ (2) Combo (SFP or RJ45) GigE routed
  ◦ (4) (RJ45) GigE switched, with PacStar PoE
- (1) RS-232/USB console combo port
- (1) USB 3.0 (for configuration backup/loading)
- Wide-range DC input
- 12 V DC output connector, KG-250X/XS compatible
- Radio battery and PacStar 400-Series power snap-together connector

Other Capabilities
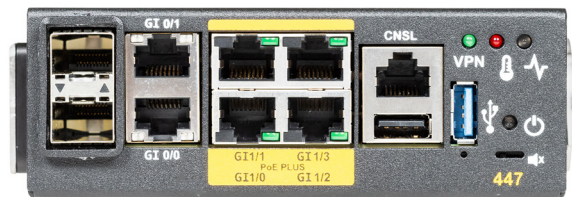- Lights-out mode
- Zeroize button for instant factory reset

Physical Specifications
- Dimensions 5.3" x 7.1" x 1.6"
- Weight 2.4 lbs.
- Snap-together connector provides DC pass-through for powering additional PacStar 400-Series products. Under most conditions, three modules can be snapped together (contact PacStar for details)
- Fanless design for quiet operation, higher reliability, and low power draw
- Operational temperature -20C to 60C
- Tested to MIL-STD 810 (contact PacStar for more details)
- Tested to MIL-STD 461 (contact PacStar for more details)
- RoHS compliant

Power Specifications
- Battery snap-together connectors for 1-2 each AN/PRC-152/148 snap on radio batteries; hot-swappable with 5+ hours runtime per battery. PacStar 447 includes built-in recharger for attached tactical radio batteries
- Wide-range DC input, 10 - 35 V DC For example, allows powering with AN/PRC-117 radio batteries with optional adaptors (not included)
- Worldwide AC power input (with adapter cable)
- Regulated clean 12 V DC output, 20 watts (supports KG-250X/XS or KG-175D)
- PoE Plus power: Up to 60 watts available PoE power
- Power draw: Nominal 13 watts total (plus PoE load)
- Locking power input connector to prevent accidental disconnection
- Power input specifications available for creating custom cables with industry-standard parts
- Available marked chassis ground for external grounding

* Reduced operational temp limit when providing maximum PoE power