



PacStar 441 Small Router Module



The PacStar 441 is listed on the Joint Interoperability Test Command (JITC) Approved Products List (APL) as a Customer Edge Router

The PacStar 441 provides high-performance routing, switching and advanced network services for critical voice, data and video connectivity in a compact, quick setup, rugged form factor. The PacStar 441 is based on Cisco[®] technology and provides up to 4 ports of PoE LAN access.

Designed from the ground up to provide flexible transport, configuration and setup options, the PacStar 441 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 the other PacStar 400-Series modules including switches, servers and gateways
- Used as a standalone router/switch module

The PacStar 441 is designed to serve the tactical communication needs of teams that deploy worldwide and have secure communication requirements in austere environments. The PacStar 441 enables teams from US DoD, Homeland Security, first responders and civilian organizations to easily and securely connect multiple devices to mission critical communications networks.

The PacStar 441 is optionally managed by PacStar IQ-Core[®] Software, which simplifies system setup, network management and protects the system from mis-configuration by operators in the field.

KEY FEATURES

- Based on Cisco ESR 5915 routing/switching module with (5) ports
- Integrated smart power supply that runs on tactical radio batteries, wide range DC input and world-wide AC input
- PoE output
- Snap-together design enables quick expansion with other PacStar 400-series products
- KG-250X compatible power output port
- Compact design for flexible packing and transport
- Extended temperature range, and fanless design improves reliability and uptime
- Managed by IQ-Core Software for easy setup and configuration
- Continuous runtime with hot swappable batteries
- Small, but powerful; only 5.3" x 7.1" x 1.6" and 2.4 lbs.

Networking Capabilities

- (5) ports: (2) routed and (3) 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 with support for up to 48 phones



Connectors

- (5) Ports total
 - (1) RJ45 (10/100 Base-T Ethernet, Routed)
 - (1) RJ45 (10/100 Base-T Ethernet, Routed, PacStar PoE),
 - (3) RJ45 (10/100 Base-T Ethernet, Switched, PacStar PoE)
- (1) RS-232 console port
- Wide range DC input
- 12 V DC output connector, KG-250X compatible
- Radio battery and PacStar 400-series power snap-together connector

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
- Fanless design for quiet operation, higher reliability, and low power draw
- Operational temperature -20C to 70C
- Tested to MIL-STD 810G by an independent lab
- Tested to MIL-STD 461F by an independent lab

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
- Wide range DC input, 10 - 35 V DC
- World-wide AC power input (with adapter cable)
- 12/48V combo-DC input (for use with PacStar 4400 CEM)
- Regulated clean 12 V DC output, 20 watts (supports KG-250X/XS or KG-175D)
- PoE power:
 - Up to 12 watts available PoE power on AC or DC input
 - On external power input up to 50 watts available PoE power
- Power draw:
 - Nominal 10 watts total
 - Max (including 15 watts of PoE devices attached) 42 watts* total

* Reduced operational temp limit when providing maximum PoE power

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.

