



PacStar 551 Rugged Server + Switch Module



PacStar 551 provides high-performance compute and switching services for critical voice/ video, data, application or virtual network function hosting in a compact, rugged form factor. The PacStar 551 is based on Intel[®] computing and Cisco[®] switching technology and provides up nine switched ports.

PacStar 500-Series is designed from the ground up to provide the compute and networking capabilities of the with the popular PacStar 400-Series, with the added benefit of environmental protection rated at IP67 for protection from dust and water. The PacStar 500-Series also features rugged M12 industry standard connectors providing protection beyond traditional RJ-45.

PacStar 551 is available with a wide variety of pre-loaded, pre-secured, and pre-qualified software applications appropriate for use in the tactical/ industrial communication applications. These include, but are not limited to:

- WAN acceleration
- Unified communications
- Video transcoding
- Cybersecurity
- Virtualized network functions such as routing, firewalls and more

PacStar 551 is ideal for use in austere and environmentally challenging locations including:

- Military vehicle-mounted, on-the-move communications and networking applications
- Industrial facilities including oil & gas, mining, and transportations use cases
- Any outdoor application requiring high-performance voice/video, network, sensor and IoT data transport

PacStar 551 utilizes the best of enterprise-class networking technologies, delivered in an OT ready package – enabling organizations to deploy the same technology for traditional networking or operational networks or to unify IT and OT networks, without sacrificing environmental protection.

The PacStar 551 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 Intel Core i5 processor, and Cisco ES2020 switching module
- Integrated smart power supply that runs on wide range DC input and world-wide AC input (with external power supply “brick”)
- PoE output
- 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
- Small, but powerful; only 10.2” x 10.9” x 2.4” and 9.0 lbs.

Server Capabilities

- Intel 4th generation (Haswell) Core i5, dual-core, up to 16 GB RAM
- Optional: Intel 5th generation (Broadwell) Core i5, dual-core, up to 32 GB RAM
- User accessible, removable, single 2.5” SSD (7 mm), up to 4 TB total storage
- (2) M12 USB 2.0 ports
- (1) M12 GigE ports
- (1) Sealed HDMI port
- (1) GigE (internally connected to switch)

Switching Capabilities

- (9) User Accessible (10/100 Base-T) Ethernet ports
- (1) Internally Connected (GigE) Ethernet

connection

- Layer 2 switching - IEEE 802.1, 802.3 standard, VTPv2, NTP, UDLD, CDP, LLDP, Unicast MAC filter, Flex Link, REP, VTPv3, EtherChannel, Voice VLAN
- 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,

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Connectors

- (10) User accessible Ethernet ports total
- (8) M12 (10/100 Base-T Ethernet, Switched – (4) 802.3at Type 1 PoE)
- (1) M12 (10/100/1000 Base-T Ethernet, Switched)
- (1) M12 (10/100/1000 Base-T Ethernet, Server)
- (1) M12 RS-232 console port (combination port serving both the Server and Switch)
- Wide range DC input
- (2) USB 2.0
- (1) HDMI

Physical Specifications

- Dimensions 10.2" x 10.9" x 2.4"
- Weight 9.0 lbs.
- Fanless design for quiet operation, higher reliability, and low power draw
- Operational temperature -20C to 60C
- MIL-STD 810G and MIL-STD 461F tests pending
- IP67 test pending

Power Specifications

- Wide range DC input, 10.5 - 35 V DC
- World-wide AC power input (with adapter cable)
- PoE power: 12 watts available PoE power (50 watts 802.3at Type 2 PoE+ option available)
- Power draw: Nominal 35 watts total
- Max (including 12 watts of PoE devices attached) 47 watts total

