



PacStar 455 Tactical Hyper-Convergence Module

Authorized distributor of PacStar products

The PacStar 455 Tactical Hyper-Convergence Module provides a high performance virtualization and storage platform for forward deploying applications or providing network attached storage in a compact, quick setup, and rugged form factor.

Ideal platform for a wide variety of edge use cases in forward deployed settings including:

- General purpose NAS storage
- Advanced datacenter or cloud replication and application performance acceleration
- Satellite/GIS imagery caching
- Video serving/storage
- Cybersecurity applications with large storage requirements such as SIEM, DLP, or threat analytics
- WAN optimization

Designed for in-theater operations, vehicle-mount, entry or forward operating base deployments for military, Homeland Security, first responders, and commercial/enterprise users, the PacStar 455 meets size, weight, and power requirements unmatched by other COTS appliances.

The physical package utilizes the PacStar 400-Series standard module form factor and patented interconnect, 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

- Intel 5th generation Xeon E3 quad-core processor for general purpose or dedicated compute tasks
- Up to 32 TB RAID SSD storage via 8 x 2.5" SSD
- Best in class Avago RAID controller for high performance and extensive RAID options
- High network port density for flexible networking options including on-board NFV
- Integrated smart power supply that runs on tactical radio batteries, wide range DC input and worldwide AC input
- Snap-together design enables quick expansion with other PacStar 400-Series products and packaging

- Compact design for flexible packing and transport
- Extensive environmental testing (pending), for tactical deployments
- Best in class SWaP: Small, but powerful; only 5.3" x 7.1" x 5.5" and only 6.4 lbs

SOFTWARE OPTIONS

Supports a wide array of software applications, NAS software platforms and hyper-converged solutions, appropriate for use in the tactical computing and storage applications.

General purpose computing:

- Microsoft Windows Server 2012 and many other Windows variants
- VMware
- Linux
- Solaris (x86)
- FreeBSD

NAS/Hyper-converged software including:

- NetApp Data ONTAP Edge (pending release)
- iSCSI/NFS SAN for VMware Datastore

PACSTAR 455 TACTICAL HYPER-CONVERGENCE PLATFORM Processor

- Intel 5th generation (Broadwell) Xeon E3 quad-core with up to 32 GB RAM

RAID Storage

- Avago MegaRAID[®] SAS 9361-8i controller
- Up to (8) user removable single 2.5" SSD (7 mm), with single SSD capacity up to 4 TB, or 32 TB raw system total storage
- RAID levels include: 0, 1, 5 and 6
- RAID spans include: 10, 50 and 60

- SATA interface, up to 6 Gb/s transfer rate per drive. System as configured tested to 30 Gbps
- 1 GB on-board cache
- Uses x8 lane PCI Express 3.0 interface to mother board high transfer rates

User I/O

- (5) GigE ports, individually routable, available for use by software routers/firewalls or other network function virtualization
- (1) RJ-45 console port, (1) Mini display port, (1) USB 3.0 Port

Power

- Wide range DC input (10 - 36 VDC)
- 12V DC output connector, KG-250X compatible, providing ~20 watts
- Radio battery and PacStar 400-Series power snap-together connector

Physical Specifications

- Dimensions 5.3" x 7.1" x 5.5" Fits into PacStar 400-Series Smart Chassis and Rack Mount Frame, consuming 3 module slots
- Weight 6.4 lbs.
- Snap together connector provides DC pass-through for powering additional PacStar 400-Series products
- (3) small fans driving air over conductively coupled heat exchangers; electronics sealing boundaries are not violated
- Environmental testing to MIL-STD 810G (Pending)
- EMI testing to MIL-STD 461 (Pending)

Power Specifications

- Battery snap-together connectors for up to (3) AN/PRC-152/148 snap on radio batteries with 2+ hours runtime total
- Wide range DC input, 10-36V
- World-wide AC power input (with adapter cable)
- Regulated clean 12V DC output, 20 watts (KG-250X support)
- Power draw: 45 watts on idle. Estimated 100 watts during sustained high usage



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.

