



Rugged, secure storage at the tactical edge. Protect your critical data from malicious cyber threats in forward deployed conditions with our rugged integrated network attached storage (NAS) system. This revolutionary, high-performance storage solution provides FIPS 140-2 certified data encryption with near-zero latency, instant data destruction and integrated key management for secure data protection.

Our customizable cybersecurity fly-away-kit meets NIST cybersecurity, FIPS and NIAP standards while providing rugged, leading-edge storage, compute capacity and technology capable of securing top-secret data at the tactical edge. This integrated system includes a Crystal Group FORCE™ rugged server, RCS7450 network switch and rugged display.

SOLUTION BENEFITS

Accelerate deployment in any conditions. This portable system provides ready, reliable performance in austere, forward-deployed environments with near-zero latency and end-to-end encryption.

High performance. Smaller footprint. When seconds count, this all-in-one system converges compute, storage and networking for ease of operation when time, power, space and functionality are critical.

Scalable for specific program needs. Crystal Group FORCE rugged servers bring unprecedented power and flexibility to the battlefield. Select up to 12 different modules for high-speed communication, expanded storage capacity, audio and enhanced security.

Secure networking. The RCS7450 rugged switch provides intelligent, scalable, stackable LAN solutions that can be configured with a NIAP certified IPsec module for end-to-end encryption tunnels from the edge to the core, allowing the control of network access, support multi-tenant networks and protect data in transit.

Advanced data security. The system provides advanced data security, encryption and compliance with Racktop CyberConverged™ high-performance, software-defined storage. It also integrates with data center and cloud capabilities to move data securely and efficiently to and from the tactical edge.

FEATURES

- Rugged, scalable architecture
- CSfC building blocks with IPsec and AES 256 encryption
- FIPS 140-2 certified data encryption and key management
- Near-zero latency and end-to-end encryption
- Chassis intrusion detection with options for instant data destruction and key recovery
- Data in transit and data at rest protection with network access control and support for multi-tenant networks

A clear advantage.

Specifications

Integrated NAS Transit System
Dimensions: Height: 11" / 27.94 cm Width: 22.5" / 57.15 cm Depth: 34.5" / 87.63 cm
Weight: 133 lbs. (60.32kg)
CPU: Intel Xeon Scalable processors
Expansion: One low profile or full-height PCIe slot (dependent on motherboard)
Expansion Bay: Option 1 Up to 4 bays populated with FORCE module accessories;
Expansion Bay: Option 2 Optical Drive with up to 2 bays populated with FORCE module accessories
Memory: 36GB DDR4 x16
System Board: Supports latest Intel Xeon Cascade Lake microprocessors
System Cooling: Forced air convection via internal high reliability fans
Power Supply: 1,200W AC 1+1 redundant
Software Compatibility: Supports Windows 10, Windows Server 2016, Windows Server 2019, VMware, BrickStore, Fornetix or Linux
Display: Sharp 19" diagonal, TFT TN, normally black AMVA
Resolution: SXGA 5:4 1280x1024
Keyboard: Sealed iKey keyboard with touchpad; optional non-sealed

Electromagnetic Compatibility Standards
FCC compliant

Environmental Standards
MIL-STD-810, Operational temperature, Method 501/502, Procedure I/II: -40°C to +55°C, display limited to -20°C ¹
MIL-STD-810, Storage, Method 501/502, Procedure I/II: -40°C to +85°C ¹
MIL-STD-810, Humidity, Method 507, Procedure II: 240 hours with conformal coating
MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport ²
MIL-STD-810, Shock, Method 516, Procedures I/V: 20g, 11msec functional shock; 40g, 11msec crash hazard shock ¹
MIL-STD-810, Vibration, Method 514, Procedure I: 3.0G, 5-2,000Hz, 60 min/axis, 3 axis
MIL-STD-167, Vibration, Type 1 ²
MIL-STD-461G, CE102, RE102 ¹
MIL-S-901, Grade A: With solid state drives ²
MIL-S-901, Grade B ²

RCS7450-24 Network Switch
Ports: 10/100/1000 Mbps RJ45 port options
Expansion Ports: 3
Expansion Port Options: SFP/SFP+, QSFP and IPsec options for 1GbE, 10GbE or 40GbE
Aggregate Stacking Bandwidth: Up to 960 Gbps with up to 12 units in a stack
Total Switching Capacity: 336 Gbps
Base Software: Layer 3 with static routes; upgrade to full Layer 3 with license
Connectors: MIL-CIRC connector power option



- 1 - Test report available.
2 - Designed to meet standard

Notice: This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered or to be offered by Crystal Group. Crystal Group reserves the right to make changes to this document at any time, without notice, and assumes no responsibility for its use. This informational document describes features that may not be currently available. Due to the numerous models and component combinations, some configuration testing remains pending. Please contact your Crystal Group Program Manager for test data on desired requirements. Export of technical data contained in this document may require an export license from the United States government. Design and specifications are subject to change.

