



**Field-tested, fail-safe and long-life performance in extreme conditions.** These 15.5"-deep switches are based on the Ruckus® ICX® 7450 series. Our redundant, stackable LAN solutions for small and medium size applications, provide intelligent, scalable, edge switch technology with enterprise-class functionality and MIL-SPEC environmental performance. The optional NIAP-certified VPN Encryption Service Module is ideal for transporting sensitive data using standards-based and interoperable implementation requiring encryption from multi-site, end-to-end secure data transfer.

Crystal Group rugged networking appliances bring plug-and-play functionality to demanding military, industrial, and commercial applications in air, on land and at sea. Top-of-the-line switches and firewalls are housed in rugged, lightweight, compact enclosures, such as transit cases or 19-inch racks with strain-hardened aircraft aluminum, designed to survive demanding environments, high shock and vibration, and extreme temperatures.

**Secure networking.** The optional NIAP-certified VPN Encryption Service Module provides hardware-based acceleration using Advanced Encryption Standards (AES). It leverages programmable hardware technology to future-proof data protection, enabling more capabilities to be added as business or mission needs evolve. The RCS7450 with the integrated IP-sec VPN service module consolidates network switching and encryption to provide VPN deployment flexibility and lifetime cost savings.

**Innovative solutions.** Crystal Group's portfolio of rugged computing products are engineered and tested to withstand challenging environments, meet or exceed military standards, and provide the latest COTS technologies and benefits, such as cost, availability, upgradability, and flexibility.

**Dependable services.** When a computing application requires a custom solution, Crystal Group delivers with vertically-integrated services, including product design and development, testing, systems engineering and integration, mechanical and electrical engineering, configuration management, and product life-cycle planning.

**Dedicated support.** Our expert staff and global network provide fast and effective product support when and where it is needed. Count on Crystal Group for prompt response times, quick turnarounds, 5+ year warranties, and quality service around the clock and around the globe.

## FEATURES

- Optional extended security, data confidentiality, and hardware-based acceleration for IP-sec
- Layer 2+ and Layer 3 capable
- Lightweight construction from billet strain, hardened aluminum
- Optional MIL-CIRC connector I/O
- Easy mounting in EIA-310 19" rack, Delrin glides, or fixed mount
- 24 copper, 48 copper and 48 SFP port switch in 15.5" 1U chassis
- Modular upgrade capability
- AC/AC, AC/DC, and DC/DC 1+1 MIL-STD-461 EMC compliance

*A clear advantage.*

## Specifications

	RCS7450-24 Copper	RCS7450-48 Copper	RCS7450-48 SFP
<b>Height</b>	1U	1U	1U
<b>Width</b>	17.32" (43.99 cm)	17.32" (43.99 cm)	17.32" (43.99 cm)
<b>Depth</b>	15.5" (39.4 cm)	15.5" (39.4 cm)	15.5" (39.4 cm)
<b>Weight</b>	16.95 lbs (7.7 kg) depending on supply configuration	17.55 lbs (8.0 kg) depending on supply configuration	17.99 lbs (8.2 kg) depending on supply configuration
<b>Cooling</b>	Forced air convection via internal, high-reliability fans		
<b>Environmental Standards</b> <sup>1 2</sup>	MIL-STD-810, Operational Temperature, Method 501/502 Procedure I/II MIL-STD-810, Vibration, Method 514, Procedure I MIL-STD-810, Shock, Method 516, Procedures I/V MIL-STD-810, Humidity, Method 507 MIL-STD-810, Altitude, Method 500		
<b>Mounting</b>	Fixed or Delrin Glides; mounts in standard EIA-310 rack		
<b>Power Supply</b>			
AC, Auto Switching	90-246VAC, Auto-switching		
DC, EMI compliant to MIL-STD-461, CE102, RE102	18-36VDC, 1+1 redundant		
Non-rugged COTS	48VDC		
<b>Connectors</b>	Available with MIL-CIRC connector I/O and for power	Available with MIL-CIRC connector for power	
<b>Switch Features</b>			
10/100/1000 Mbps SFP/ RJ-45 Ports	24 RJ-45 ports	48 RJ-45 ports	48 SFP ports
Modular Slots	Three slots can be used to add any of the following options: 4x 1GbE SFP Ports, 4x 1/10 GbE SFP+ Ports, 4x 1/10GBASE-T RJ-45 Ports, 1x 40GbE QSFP+ Port		
IPv4/v6 L3 Routing	With license		
Stacking Bandwidth	960 Gbps		
Stacking Density	12		
Stacking Distance	10 km		
Switching Capacity (Full Duplex)	288 Gbps	336 Gbps	336 Gbps
Forwarding Capacity (Full Duplex)	214 Mbps	250 Mbps	250 Mbps



Shown with optional MIL-CIRC connectors

1 - Testing in progress

2 - Designed to meet standard

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