



Field tested, failsafe and long life performance in extreme conditions. These units are based on the Ruckus® ICX® 7850 series. These switches are enterprise class, stackable LAN solutions for small and medium size applications. Crystal switches provide intelligent, scalable edge switch technology with robust functionality and MIL SPEC environmental performance.

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

Innovative solutions. Crystal Group's portfolio of rugged and industrial computing products are engineered and tested to withstand challenging environments, meet and exceed military and industrial 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 — on time and on budget — with professional services, including product design and development, testing, systems engineering and integration, mechanical and electrical engineering, configuration management, and product lifecycle planning.

Dedicated support. Crystal Group's expert staff and global network provide fast and effective product support when and where it is needed, whether in-house or in the field. Count on Crystal Group for quick response times, quick turnarounds, 5+ year warranties, and quality service around the clock and around the globe.

FEATURES

- Light weight construction from billet strain, hardened aluminum
- Easy mounting in EIA-310 19" rack, Delrin glides, or fixed mount
- 32 port designs in 19" chassis
- Layer 2+ and Layer 3 capable
- FCC and MIL-STD-461 EMC compliant
- AC power input

A clear advantage.

Specifications

	RCS7850-32Q
Mechanical	
Height	1U
Width	17.32" (43.99 cm)
Depth	19" (48.26 cm)
Weight	19.98 lbs (9.06 kg)
Cooling	Forced air convection via internal high reliability fans
Designed to Environmental Standards (testing in progress)	MIL-STD-810, Operational Temperature, Method 501/502 Procedure I/II: -40°C to +50°C MIL-STD-810, Vibration, Method 514, Procedure I: 3 GRMS, 5-2000Hz, 60 min/axis MIL-STD-810, Shock, Method 516, Procedures I/V: 20g, 11msec–functional shock; 40g, 11msec crash hazard shock MIL-STD-810, Humidity, Method 507 - with kit MIL-STD-810, Altitude, Method 500: 12,500ft operation, 40,000ft transport
Mounting	Fixed or Delrin glides, mounts in standard EIA-310 rack
Power Supply	100 - 240 VAC
Switch Features	
Fixed Ports: 40/100 GbE QSFP28	32
Console Port	1
Out of band management port	1
Aggregated Stacking Bandwidth	9.6 Tbps
Maximum units per stack	12
Dynamic Pack Buffer Size	12.2 MB
Maximum Stacking Distance	10 KM
Latency	550ns 40 GbE-40GbE/ 2.9, US 10 GbE-10GbE with license
Base Software	Layer 3 with static routes, upgradable to full L3 with license
Switching Capacity (Full Duplex)	6.4 Tbps
Forwarding Capacity (Full Duplex)	2 Bpps

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.

