



**Field-tested, fail-safe and long life performance in extreme conditions.** Crystal Group rugged networking appliances bring plug-and-play functionality to demanding military, industrial, and commercial applications in air, on land and at sea. Based on the Ruckus® ICX® 7750 series, this rugged switch provides intelligent, scalable stackable LAN solutions with enterprise class functionality and MIL-SPEC environmental performance.

High-performance switches are housed in rugged, light-weight, and compact enclosures made of strain-hardened aircraft aluminum, designed to survive extreme temperatures, humidity, shock and vibration, dust, sand and salt fog.

**Innovative solutions.** Crystal Group's portfolio of rugged and industrial computing products are engineered and tested to withstand challenging environments, meet and 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

- Light weight construction from billet strain, hardened aluminum
- Easy mounting in EIA-310 19" rack, Delrin glides, or fixed mount
- 48 port designs in 19" chassis
- Available with copper or fiber ports
- Layer 2+ and Layer 3 capable
- AC/AC, AC/DC, and DC/DC 1+1, FCC and MIL-STD-461 EMC compliant
- Optional Angelus 10G MIL-CIRC connectors

*A clear advantage.*

## Specifications

	RCS7750-48C, AC Power	RCS7750-48C, DC Power	RCS7750-48CM	RCS7750-48F
Height	1U	2U	2U	1U
Width	17.32" (43.99 cm)	17.32" (43.99 cm)	17.32" (43.99 cm)	17.32" (43.99 cm)
Depth	19" (48.26 cm)	17" (43.18 cm)	22" (55.88 cm)	19" (48.26 cm)
Weight	19.98 lbs (9.06 kg) depending on power supply configuration	26 lbs. (11.79 kg) depending on power supply configuration	33 lbs. (14.96 kg) depending on power supply configuration	19.98 lbs (9.06 kg) depending on power supply configuration
Cooling	Forced air convection via internal high reliability fans			
Designed to (testing in progress) Environmental Standards	MIL-STD-810, Operational Temperature, Method 501/502 Procedure I/II: -40°C to +55°C MIL-STD-810, Vibration, Method 514, Procedure I: 4.63 GRMS, 5-2000Hz, 60 min/axis - with solid state drives + vibration kits¹ MIL-STD-810, Shock, Method 516, Procedures I/V: 35g, 11msec-functional 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			
AC, FCC Compliant, Auto Switching 1+1	100-240VAC, 50/60Hz, 500W	-	-	100-240VAC, 50/60Hz, 500W
DC, FCC Compliant (1+1)	43-53VDC	18-36VDC	18-36VDC	43-53VDC
Fixed Ports: 1/10 GbE SFP/ SFP+	-	-	-	Forty-Eight
Fixed Ports: 1/10 GBASE-T RJ45	Forty-Eight	Forty-Eight	Forty-Eight	-
Fixed Ports: 40 GbE QSFP+	Six	Six	Six	Six
Optional Expansion Ports: 40 GbE QSFP+	Six	Six	Six	Six
Console Port	One	One	One	One
Out of band management port	One	One	One	One
Aggregated Stacking Bandwidth	5.76 Tbps	5.76 Tbps	5.76 Tbps	5.76 Tbps
Maximum units per stack	Twelve	Twelve	Twelve	Twelve
Dynamic Pack Buffer Size	12.2 MB	12.2 MB	12.2 MB	12.2 MB
Maximum Stacking Distance	10 KM	10 KM	10 KM	10 KM
Latency	550ns 40 GbE-40GbE/ 2.9, US 10 GbE-10GbE w/ license	550ns 40 GbE-40GbE/ 2.9, US 10 GbE-10GbE w/ license	550ns 40 GbE-40GbE/ 2.9, US 10 GbE-10GbE w/ license	550ns
Base Software	Layer 3 with static routes, upgradable to full L3 w/ license	Layer 3 with static routes, upgradable to full L3 w/ license	Layer 3 with static routes, upgradable to full L3 w/ license	Layer 2+ with static routes, upgradable to full L3 w/ license
Switching Capacity (Full Duplex)	1.92 Tbps	1.92 Tbps	1.92 Tbps	1.92 Tbps
Forwarding Capacity (Full Duplex)	1.44 Bpps	1.44 Bpps	1.44 Bpps	1.44 Bpps

RCS7750-48CM shown with optional Angelus 10G MIL-CIRC connectors.



1 - Test report available for AC and DC power versions (48C copper)

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