Innovative Datacenter Switch

48 x 25GE SFP28 ports & 6 x 100GE QSFP28 Ports

High-density, datacenter optimized server switching.

With customer demands for bandwidth increasing exponentially, datacenters must improve upon the density of their networking environments on a continuous basis. Offering superior performance, flexibility, and reliability, the design of the S8900-54XC switch makes it a datacenter-class 25GE/100GE switch product fully optimized to meet customers' large capacity data switching needs. The S8900-54XC provides a high number of 25GE and 100GE ports in a single compact switch, making automation and orchestration easier than ever. By simplifying datacenter network infrastructures through its innovative architecture and extensive datacenter-ready features, including its low-latency, high-density ports, the S8900-54XC makes scale-out easy, giving datacenters unmatched flexibility to meet whatever bandwidth demands the future may bring. Flexible, reliable powerful – maximize your return on investment with the next-generation S8900-54XC.

Key applications

- Develop network OS installer environment (ONIE support).

- Better network performance and more efficient use of hardware with QSFP+ to 10G server connection.

- Increase logical upgrade paths for server connection: 25GE, 4 x 10GE, 2 x 50GE.

- Deploy as Top-of-Rack switch supporting 10 or 25GE to servers, with 40 or 50 or 100GE uplinks.

- Migrate and accelerate the development of 25GE Ethernet.

- Superior management and security through console and out-of-band interface options.

Key features

- 48 x 25GE SFP28 & 6 x 100GE QSFP28 ports for downlinking and uplinking capability.

- Modular dual power supply and fan assembly with overcurrent, overvoltage, and overheating protection.

- Next-generation spine-leaf network architecture, enhancing capacity and optimizing scaling.

- CPU: Intel® Rangeley C2558 2.4G 4-Core.

- Specifically designed for utilization in high-performance datacenter environments.

- Hot and cold backup switching without system reboot or reconfiguration ensuring uninterrupted data processing and operation.

Specifications

Physical

- Compact full featured modular 10/25/40/50/100GE datacenter switch
- 1 Mini USB serial console port with mini-USB to RJ45 converter cable
- 1 10/100/1000 Base-T Ethernet for Out-of-Band management
- 1 USB 2.0 Type-A port

Processor	Intel® Rangeley C2558 2.4G 4-Core
Memory	DDR3 8GB w/ ECC SODIMM
Storage	M.2 SSD 64GB
ASIC	Broadcom BCM56967 (Tomahawk)
Built-in Interfaces	Total 25GE: 48 Total 100GE: 6
LED	Power, system, link & activity, fan & PSU status
Chassis	1 RU, 440w x 44h x 406d mm (17.32" x 1.73" x 15.98") Weight (including 2 x PSUs & 4 x fans): 9.54 kg (21.03 lb)
Redundancy	Two hot swappable power supplies with integrated fans and trays

Environmental

- Fresh air compliant to 45°C (113°F)
- Rack mounting kit

Power supply	AC input : 100V-240V,7-3.5A 60/50Hz DC input : 240V, 2.75A (240Vdc China only) Typical/Max power draw: 360/420 Watts
Max. operating Specs.	Operating temperature: 0°C to 45°C (32°F to 113°F) Operating humidity: 10% to 90% (RH), noncondensing
Max. non-operating Specs.	Storage temperature: –40°C to 70°C (–40°F to 158°F) Storage humidity: 5% to 95% (RH), non-condensing

Performance

Switching Capacity	3.6Tbps
Packet throughput	2678Mpps

Regulatory compliance

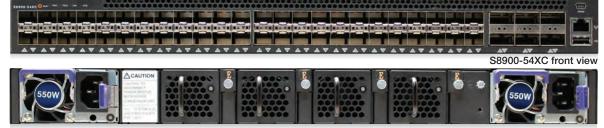|	
EMC	EN55032 Class A EN61000-3-2/EN61000-3-3 EN55024 FCC P15B Class A BSMI (CNS 13438) Class A CCC (GB9254) Class A RoHS: RoHS 6 UL
Safety	IEC/EN 60950-1/A2 BSMI (CNS 14336-1) CCC (GB4943)

S8900-54XC Views

S8900-54XC front view

S8900-54XC rear view

Supported Accessories

Transceiver	10GE, SR SFP+ | 10GE, LR SFP+ | 25GE, CR SFP28 | 25GE, SR SFP28 | 40GE, SR4 QSFP+ | 40GE, LR4 QSFP+ | 100GE, CR4 QSFP28 | 100GE, SR4 QSFP28 | 100GE, LR4 QSFP28
Cable types	10GE, SFP+ to SFP+, AOC | 10GE, SFP+ to SFP+, DAC | 25GE, SFP28 to SFP28, AOC 25GE, SFP28 to SFP28, DAC | 40GE, QSFP+ to QSFP+, AOC | 40GE, QSFP+ to QSFP+, DAC 40GE, MTP to 4 x LC optical breakout | 40GE, 4 x 10G, QSFP+ to 4 x SFP+, DAC 100GE, QSFP28 to QSFP28, AOC | 100GE, QSFP28 to QSFP28, DAC 100GE, MTP to 4 x LC optical breakout | 100GE, 4 x 25G, SFP28 to 4 x SFP28, DAC
Power supply types	CRPS550W-AC-FTB, 550W AC/DC PSU, airflow from panel to rear side (front to rear) CRPS550W-AC-BTF, 550W AC/DC PSU, airflow from rear to panel side (rear to front)
Fan types	Fan normal airflow from panel to rear side Fan reverse airflow from rear side to panel Fan spare supports normal and reverse airflow operations