

S9620-54DC

Open Aggregation Router

The S9620-54DC is a versatile 54-port open aggregation router powered by the Broadcom® Qumran3u silicon, designed to bridge the gap between high-speed core connectivity and diverse edge access. The hardware interface includes 2 x 400G QSFP-DD ports, 4 x 100G QSFP-DD ports, 8 x 50G SFP56 ports, and 40 x 25G SFP28 ports, offering a flexible multi-rate transition from 1G to 400G. The platform is optimized for 400ZR and OpenZR+ coherent optics, allowing for direct metro aggregation over long distances without the need for additional optical transponders. The device provides hardware-based MACsec on all ports to ensure line-rate data encryption across the entire aggregation layer. Due to its compact 480mm depth, the S9620-54DC is particularly suited for space-constrained edge environments or telecommunications cabinets where traditional deep-chassis routers cannot be deployed. The S9620-54DC deep buffering and rich feature set enable this router to manage the unpredictable traffic bursts associated with 5G xHaul and high-performance AI inference at the network edge.



KEY BENEFITS

- Enables hardware-based MACsec on all ports to ensure robust, end-to-end data encryption across the entire aggregation layer.
- Optimized for 400ZR and OpenZR+ coherent optics, allowing direct metro aggregation over long distances without the need for external optical transponders.
- Features a compact 480mm depth design, making it perfectly suited for space-constrained edge environments and standard telecommunications cabinets.
- Equipped with deep buffering to easily manage unpredictable traffic bursts associated with 5G xHaul and high-performance AI inference at the network edge.
- Streamlines maintenance and maximizes uptime with redundant, hot-swappable power and fan modules.

KEY FEATURES

- Supports full SyncE and IEEE 1588v2 (T-GM, T-BC/OC, T-TC)
- Integrated Stratum 3E OCXO with optional hold over performances
- Supports Time Sensitive Networking (TSN) for low packet loss and low delay variation
- Support full Segment Routing over IPv6 (SRv6)
- Class C timing accuracy support
- Internal GNSS receiver for master clock implementations
- Supports 50G, 100G, and 400G for 5G
- Hot swappable power supplies with 1+1 redundancy support
- Hot swappable fan modules with 4+1 redundancy support

SPECIFICATIONS

PHYSICAL

◆ 40 x 1/10/25G SFP28 ports	
◆ 8 x 1/10/25/50G SFP56 ports	
◆ 4 x 100G QSFP-DD ports	
◆ 2 x 400G QSFP-DD ports	
◆ 1 x 100/1000M RJ-45 management port	
◆ 1 x RJ45 serial console ports	
◆ 1 x USB 3.0 Type-A port	
ASIC	Broadcom® Qumran3u BCM88400
Processor	Intel® Xeon® D 4 Cores@2.4GHz (Standard) Intel® Xeon® D 8 Cores@1.9GHz (Premium)
Memory	2x16GB DDR4 SO-DIMM with ECC (Standard) 2x32GB DDR4 SO-DIMM with ECC (Premium)
Storage	1x160G SSD (Standard) 2x160G SSD (Premium, VROC RAID)
BMC	Aspeed AST2620
Timing Interfaces	1 x GNSS input SMA 1 x 10MHz input/output SMB 1 x 1PPS input/output SMB 1 x ToD input/output RJ45
Timing Support	Stratum 3E OCXO ITU-T Synchronous Ethernet (SyncE) IEEE 1588v2 (Default Profile, G.8265.1 G8275.1, G.8275.2 profiles) T-TC, T-BC/OC, T-GM
Chassis (WxDxH)	1RU, 440.0 mm(W) x 480.0 mm(D) x 44 mm(H) or 17.32" x 18.89" x 1.73" Weight: 10.76 kg (without FRU)
Redundancy	Hot swappable, 1+1 redundant PSUs Hot swappable, 4+1 redundant Fans

*NOS integration is necessary to activate the specific feature.
**Additional license is required

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ENVIRONMENTAL

Power Supply	AC input: 100 to 240V, 10A DC input: -40 to -75V, 28A Typical power: 125 Watts (no transceiver)
Max. Operating Specs.	Operating temperature: -40°C to 65°C (-40°F to 149°F) Operating humidity: 5% to 85% (RH), non-condensing
Max. Non-Operating Specs.	Storage temperature: -40°C to 70°C (-40°F to 158°F) Storage humidity: 5% to 93% (RH), non-condensing

PERFORMANCE

Switching Capacity	1.2Tb/s
Deep Buffer	4GB

REGULATORY COMPLIANCE

Safety	UL 62368-1 IEC 62368-1	EMC	FCC Part 15, Subpart B, Class A ICES-003, Class A EN 55032, Class A EN 300 386 EN 55035 EN 301 489 EN 303 413 VCCI CISPR 32, Class A
Environment	WEEE		

Specifications are subject to change without notice. Please contact our sales team for the latest configuration options.

S9620-54DC Front and Back Views



SUPPORTED ACCESSORIES

Compatible Transceivers Types

400GE QSFP-DD OpenZR+, 400GE QSFP-DD ZR,400GE QSFP-DD ER4, 400GE QSFP-DD LR4, 400GE QSFP-DD FR4, 400GE QSFP-DD SR8, 400GE QSFP-DD DR4, 400GE QSFP-DD DR4+, 400GE QSFP-DD LR4, 100GE QSFP-DD ZR+, 100GE QSFP28 ZR4, 100GE QSFP28 ER4, 100GE QSFP28 SR4, 100GE QSFP28 LR4, 50GE SFP56 SR, 50GE SFP56 LR, 50GE SFP56 ER, 25GE SFP28 SR, 25GE SFP28 LR, 25GE SFP28 ER, 10GE SFP+ SR, 10GE SFP+ LR, 10GE SFP+ ER, 1GE SFP SX, 1GE SFP LX

Compatible Timing Cable Types

50 ohms SMA coaxial cable with 1/4-36UNS-2B connector for GNSS
50 ohms SMB coaxial cable with 10-32UNF-2A connector for 1PPS and 10MHz
Shield cable with RJ45 for ToD

Available to Order - Power Supply Type

Power Supply Types
PSU-751-AESR-1C, 750W AC, exhaust air flow
PSU-751-DESR-1C, 750W DC, exhaust air flow

Fan Types

FAN-405636-HD, exhaust air flow

