

S9610-46DX

Open Aggregation Router

The S9610-46DX open aggregation router, is a multi-function, white box routing platform. It is equipped with Broadcom's Qumran2c+ merchant silicon chip, an Intel® Xeon® D processor, and features 40x100G and 6x400G high speed ports with a switching capacity of up to 7.2Tbps.

The S9610-46DX can be deployed at aggregation hubs to provide fixed and mobile transport aggregation. It can also be programmed to be a Broadband Network Gateway (BNG) to enable the next generation broadband network. In addition, with a high port density, Class C timing and fully supporting SyncE and IEEE 1588v2, our S9610-46DX is capable of fulfilling the role of any type of mobile network aggregation.

Our S9610-46DX open aggregation router is also capable of converging IP/Optical networks. It is compatible with 400G ZR/ZR+ transceivers from multiple vendors to enable long distance optical transmissions while simplifying the optical transport network infrastructure.



KEY BENEFITS

- Highly reliable, non-blocking switching capacity
- Streamline fixed and mobile networks into a converged network
- Integrate open NOS applications for highly reliable and flexible networks
- Futureproof to meet evolving requirements of 5G with ultra-low latency, high precision frequency and phase timing synchronization support
- Quick and easy installation onto standard 19" server racks
- User friendly maintenance design with redundant and hot swappable power and fan modules

KEY FEATURES

- High-density 40x100G interfaces for large-volume traffic aggregation
- 6x 400G interfaces with OpenZR+ Support
- 7.2Tbps switching capacity with an 8-Core, 2.1GHz processor
- 8GB Deep buffer
- Hardware supports full SyncE and IEEE 1588v2
- MACsec supports on all ports
- TCAM option available to meet diverse deployment requirements
- Integrated Stratum 3E OXCO with optional hold over performances
- Class C timing accuracy
- Rich timing interfaces: GNSS, 10MHz, 1PPS, BITS and ToD

SPECIFICATIONS

PHYSICAL

- 6 x 40/100/200/400G QSFP-DD ports with 400G ZR/ZR+ support
- 40 x 40/100G QSFP28 ports
- 4 x 10/25G SFP28/SFPDD ports (In-band port share with 100GE Port 0)
- 4 x 10G SFP+ management ports
- 1 x RJ45 & Micro USB serial console port
- 1 x 100/1000M RJ45 management port
- 1 x USB 3.0 Type-A port

Processor	Intel Icelake-D 8-Core @ 2.1GHz
Memory	64G DDR4 (Up to 128GB)
Storage	128G SSD (Up to 2x256GB)
ASIC	Broadcom Qumran2c+ BCM88840 Broadcom OP2 BCM16K
BMC	AST2620
Interfaces	1 x GNSS input SMA
Timing	1 x 10MHz input/output SMB 1 x 1PPS input/output SMB 1 x ToD input/output RJ45 1 x BITS input/output RJ48
Timing Support	Stratum 3E OCXO ITU-T Synchronous Ethernet (SyncE) IEEE 1588v2 - Default, G.8265.1 G.8275.1, G.8275.2, SMPTE ST 2059-2+, T-GM, T-BC/OC, T-TC
Chassis (WxDxH)	2 RU, 436 x 762 x 87.7 mm or 17.17" x 30" x 3.45" Weight: 22.64kg or 49.91lb (without FRU)
Redundancy	Hot-swappable, 1+1 redundant PSU Hot-swappable, 3+1 redundant Fans

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

S9610-46DX

Telecom
Networking
Solutions

ENVIRONMENTAL

Power Specs.	AC input: 200 to 240V, 12.5A DC input: -40 to -72V, 60A Typical Power: 626W (no transceiver)
Max. Operating Specs.	Operating temperature: 0°C to 45°C (32°F to 113°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	7.2Tbps
Deep Buffer	8GB

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 301 489 EN 303 413 EN 55035 EN 62479 EN 50663 VCCI CISPR 32, Class A NEBS GR-1089
Environment	NEBS GR-63 WECC		

Specifications are subject to change without notice.
Contact our sales team for current configuration options.

S9610-46DX Front and Rear Views



ACCESSORIES

Compatible Transceivers Types
400G QSFP-DD SR, 400G QSFP-DD LR, 400G QSFP-DD ER, 400G QSFP-DD ZR, 400G QSFP-DD OpenZR+, 100G QSFP28 SR, 100G QSFP28 LR, 100G QSFP28 ER, 100G QSFP28 ZR, 100G QSFP28 OpenZR+, 25G SFP28 SR, 25G SFP28 LR, 10G SFP+ SR, 10G SFP+ LR

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
Shield cable with RJ48 for BITS

Available to Order
Power Supply Types
PSU-202-DESR, 2000W DC, exhaust air flow
PSU-202-AESR, 2000W AC, exhaust air flow

FAN Types
FAN-808012-HCE, exhaust air flow

