

## S9610-48DX

### Open Aggregation Router

Premium Version

The S9610-48DX 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 8x400G high speed ports with a switching capacity of up to 7.2Tbps.

The S9610-48DX 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 S9610-48DX is capable of fulfilling the role of any type of mobile network aggregation.

Our S9610-48DX 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
- 8x 400G interfaces with OpenZR+ Support
- 7.2Tbps switching capacity with a high performance 12-Core, 1.8 GHz processor
- 8GB Deep buffer
- MACsec supports on all ports
- TCAM option available to meet diverse deployment requirements
- Integrated Stratum 3E OCXO with optional hold over performances
- Class C timing accuracy
- Rich timing interfaces: GNSS, 10MHz, 1PPS, BITS and ToD

# SPECIFICATIONS

## PHYSICAL

- ◆ 8 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 12-Core @ 1.8GHz

Memory 64G DDR4

Storage 2 x 256G SSD

ASIC Broadcom Qumran2c+ BCM88840

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 Profile, G.8265.1 G8275.1, G.8275.2 profiles), T-TC, T-BC/OC, T-GM

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

Redundancy Hot-swappable, 1+1 redundant PSU  
Hot-swappable, 3+1 redundant Fans

## ENVIRONMENTAL

Power Specs. AC input: 200 to 240V, 12.5A  
DC input: -40 to -72V, 60A  
Typical Power: 548 W (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  
WEEE

Specifications are subject to change without notice.

# S9610-48DX

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S9610-48DX 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

