



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
- Class C timing accuracy support
- Fully supports SyncE and IEEE 1588v2 timing synchronization profiles
- Integrated Stratum 3E OCXO with optional hold over performances
- Support full Segment Routing over IPv6 (SRv6)
- MACsec supports on all ports
- TCAM option available to meet diverse deployment requirements

## **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) Broadcom Oumran2c+ BCM88840 ASIC Broadcom OP2 BCM16K ВМС AST2620 1 x GNSS input SMA Interfaces 1 x 10MHz input/output SMB Timing 1 x 1PPS input/output SMB 1 x ToD input/output RJ45 1 x BITS input/output RJ48 Stratum 3E OCXO **Timing** ITU-T Synchronous Ethernet (SyncE) Support\* IEEE 1588v2 - Default, G.8265.1 G.8275.1,

TEEE 1588v2 - Default, G.8265.1 G.8275.1, G.8275.2, SMPTE ST 2059-2--, T-GM, T-BC/OC, T-TC

Chassis 2 RU, 436 x 762 x 87.7 mm or 17.17" x 30" x 3.45"

(WxDxH) 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

**ENVIRONMENTAL** 

Power Specs.	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	Storage temperature: –40°C to 70°C (–40°F to 158°F)

Storage humidity: 5% to 93% (RH), non-condensing

### **PERFORMANCE**

Specs.

Switching Capacity	7.2Tbps
Deep Buffer	8GB

### REGULATORY COMPLIANCE

Safety UL 62368-1 IEC 62368-1	FCC Part 15, Subpart B, Class A ICES-003, Class A EN 55032, Class A	
Environment NEBS GR-63 WEEE		EN 300 386 EN 301 489 EN 303 413 EN 55035 EN 62479 EN 50663 VCCI CISPR 32, Class A NEBS GR-1089

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

# S9610-46DX

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



Solutions

**Networking** 

Telecom