



metro aggregation.

Specializing in 5G time-critical applications, the S9600-28DX can act as an Edge Grandmaster (T-GM) or Roundary Clock (T-RC). Our open aggregation router is compatible with high accuracy fronthaul synchronization.

to enable next generation broadband network. Supporting OpenZR+ makes it an ideal solution for

Boundary Clock (T-BC). Our open aggregation router is compatible with high accuracy fronthaul synchronization and timing requirements to ensure error free operation of 5G and cooperative radio techniques.



# **KEY BENEFITS**

- Highly reliable, high performance routing platform
- Enable Time Sensitive Networking for 5G compatibility
- Integrate open NOS applications for highly reliable composable networks
- Futureproof to meet the evolving requirements of 5G with ultra-low latency, high precision frequency and phase timing synchronization support
- Suitable for WAN and long-haul applications, supports OpenZR+ for metro and regional aggregation
- Streamline maintenance with redundant and hot swappable power and fan modules

# **KEY FEATURES**

- High density, 24x100GE ports with additional 4x400GE ports
- 2.4Tbps switching capacity with an 8-Core, 2.1GHz processor
- 4GB Deep Buffer
- Supports full SyncE and IEEE 1558v2 (T-GM, T-BC, T-TC, T-TSC)
- Integrated Stratum 3E OCXO with optional hold over performances
- Class C timing accuracy support
- Internal GNSS receiver for master clock implementations
- Rich timing interfaces: GNSS, 10MHz, 1PPS and ToD
- Support full Segment Routing over IPv6 (SRv6)
- Hot swappable power supplies with 1+1 redundancy support
- Hot swappable fan modules with 3+1 redundancy support

# **SPECIFICATIONS**

## PHYSICAL

4 x 40/100/200/400G QSFP-DD ports with 400G ZR/ZR+ support

24 x 40/100G QSFP28 ports

4 x 1/10/25G SFP28 (In-band port share with 100GE Port 0)

1 x RJ45 & Micro USB serial console ports

1 x 100/1000M RJ45 management port

1 x USB 3.0 Type-A port

Processor	Intel Icelake-D 8-Core @ 2.1GHz
Memory	32GB DDR4
Storage	128GB SSD
ASIC	Broadcom Qumran2c BCM88820
ВМС	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, G.8265.1 G.8275.1, G.8275.2, SMPTE ST 2059-2, T-GM, T-BC/OC, T-TC Time Sensitive Networking (TSN)
Chassis (WxDxH)	2RU, 436 x 762 x 87.7 mm or 17.17" x 30" x 3.45" Weight: 17.66kg or 38.93lb (without FRU)
Redundancy	Hot swappable, 1+1 redundant PSU

Hot swappable, 3+1 redundant Fans

## **ENVIRONMENTAL**

Power Specs. AC input: 100 to 240V, 12A

DC input: -40 to -75V, 40A

Typical power: 324 Watts (no transceiver)

Max. Operating

Operating temperature: 0°C to 45°C (32°F to 113°F) Specs.

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** 2.4Tbps

Deep Buffer 4GB

## REGULATORY COMPLIANCE

Safety UI 62368-1 IEC 62368-1 NOM

**Environment WEEE** 

FCC Part 15, Subpart B, Class A ICES-003, Class A **EMC** 

EN 55032, Class A EN 55035 EN 300 386

EN 301 489 EN 303 413 EN 62479 EN 50663

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

# S9600-28DX

#### S9600-28DX Front and Back Views





# **ACCESSORIES**

#### Compatible Transceiver 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, 25G SFP28 SR, 25G SFP28 LR, 25G SFP28 ER,10G SFP+ SR, 10G SFP+ LR, 10G SFP+ ER, 1G SFP SX, 1G SFP LX, 1G SFP EX

## 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 Types**

PSU-132-DESR, 1300W DC, exhaust air flow PSU-132-AESR, 1300W AC, exhaust air flow

## Fan Types

FAN-803816-HI, exhaust air flow



Solutions

**Networking** 

Telecom

<sup>\*</sup>NOS integration is necessary to activate the specific feature

<sup>\*\*</sup>Additional license is required