

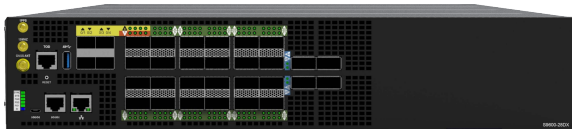
# S9600-28DX

## Open Aggregation Router

The S9600-28DX, is a multi-function, white box open aggregation router. It is equipped with Broadcom's Qumran2c merchant silicon with Intel's Icelake processor. The platform features 24x100G and 4x400G high speed ports with a switching capacity of up to 2.4Tbps.

The S9600-28DX can be deployed at C-RAN hubs to provide 5G fronthaul transport aggregation, positioned at the backhaul for aggregating BBU pools, or be programmed to be a Broadband Network Gateway (BNG) to enable next generation broadband network. Supporting OpenZR+ makes it an ideal solution for metro aggregation.

Specializing in 5G time-critical applications, the S9600-28DX can act as an Edge Grandmaster (T-GM) or 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
- Fully supports SyncE and IEEE 1588v2 timing synchronization profiles
- Integrated Stratum 3E OCXO with optional hold over performances
- Class C timing accuracy
- Internal GNSS receiver for master clock implementations
- Rich timing interfaces: GNSS, 10MHz, 1PPS and ToD

# 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
BMC	AST2620
Timing	1 x GNSS input SMA
Interfaces	1 x 10MHz input/output SMB 1 x 1PPS input/output SMB 1 x ToD input/output RJ45

Timing Support*	Stratum 3E OCOXO 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
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

S9600-28DX

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## ENVIRONMENTAL

Power Specs.	AC input: 100 to 240V, 12A DC input: -40 to -75V, 40A Typical power: 324 Watts (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	2.4Tbps
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 55035 EN 300 386 EN 301 489 EN 303 413
Environment	WEEE		EN 62479 EN 50663

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

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

