

## S9600-30DX

### Open Aggregation Router

The S9600-30DX open aggregation router, is a multi-function, disaggregated white box aggregation routing platform with an external TCAM option. It is equipped with Broadcom's Jericho2 merchant silicon, a selection of Intel processors, features high speed ports that support 400ZR/OpenZR+, and a switching capacity of up to 4.8Tbps.

The S9600-30DX can be deployed at C-RAN hubs to provided RAN vendor agnostic fronthaul transport aggregation or be positioned at the backhaul for aggregating BBU pooling. With 100G and 400G supporting OpenZR+, it provides better usage of bandwidth for metro and regional aggregation. With Class C timing accuracy and fully supporting SyncE and IEEE 1588v2, our S9600-30DX is capable of fulfilling the role of any type of network aggregation.

Specializing in 5G Time Sensitive Networking applications, the S9600-30DX complies to the IEEE 802.1CM and can act as an Edge Grandmaster (GM) clock. Our open aggregation router is compatible with high accuracy fronthaul synchronization and timing requirements (ITU-T G.8273.2 T-BC, Class C) to ensure error free operation of 5G and cooperative radio techniques.



### KEY BENEFITS

- Highly reliable, non-blocking switching capacity
- 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 speed 100G and 400G ports with support for OpenZR+
- 4.8Tbps switching capacity with an 8 Core, 1.9GHz processor
- 8GB Deep buffer
- Fully supports SyncE and IEEE 1588v2 timing synchronization profiles
- Integrated Stratum 3E OXCO with optional hold over performances
- Class C timing accuracy
- Internal GNSS receiver for master clock implementations
- Rich timing interfaces: GNSS, 10MHz, 1PPS, ToD and BITS
- TCAM to offer additional table sizes
- Hot swappable power supplies with 1+1 redundancy support
- Hot swappable fan modules with 3+1 redundancy support

# SPECIFICATIONS

## PHYSICAL

- ◆ 6 x 100/400G QSFP-DD ports with 400G ZR/ZR+ support
- ◆ 8 x 40/100G QSFP-DD ports with OpenZR+ support
- ◆ 16 x 40/100G QSFP28 ports
- ◆ 1 x RJ45 & Micro USB serial console ports
- ◆ 2 x 10G SFP+ management ports
- ◆ 1 x 100/1000M RJ45 management port
- ◆ 1 x USB 2.0 Type-A port

Processor	Intel Skylake-D 8-Core @ 1.9GHz
Memory	32GB DDR4 (Up to 64GB)
Storage	128GB SSD
ASIC	Broadcom Jericho2 BCM88690 Broadcom OP2 BCM16K
BMC	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 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 Time Sensitive Networking (TSN)
Chassis (WxDxH)	2RU, 436 x 762 x 87.7 mm or 17.17" x 30" x 3.45" Weight: 20.62kg or 45.46lb
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.	AC input: 200 to 240V, 10A DC input: -40 to -72V, 50A Typical power: 464 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	4.8Tbps
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 55035 EN 301 489 EN 303 413 EN 62479 EN 50663 VCCI CISPR 32, Class A
Environment	ETSI 300 019 WEEE		

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

# S9600-30DX

Telecom  
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Solutions

S9600-30DX Front and Back Views



## ACCESSORIES

### Compatible Transceiver Types

400G QSFP-DD OpenZR+, 400G QSFP-DD ZR, 400G QSFP-DD SR8, 400G QSFP-DD FR4, 400G QSFP-DD LR4, 400G QSFP-DD ER4, 400G QSFP-DD DR4, 400G QSFP-DD DR4+, 400G QSFP-DD PLR4, 200G QSFP56 SR4, 200G QSFP56 FR4, 100G QSFP28 SR4, 100G QSFP28 LR4, 100G QSFP28 ER4, 100G QSFP28 ZR4, 100G OpenZR+

### 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-162-DESR, 1600W DC, exhaust air flow  
PSU-162-AESR, 1600W AC, exhaust air flow

#### Fan Types

FAN-803816-HI, exhaust air flow

