

# S9600-72XC

## Open Aggregation Router

The S9600-72XC open aggregation router, is a multi-function, disaggregated white box aggregation routing platform with an external TCAM. It is equipped with Broadcom's Qumran2c merchant silicon chip and an Intel Skylake processor featuring 64x25G and 8x100G high speed ports with a switching capacity of up to 2.4Tbps.

The S9600-72XC can be deployed at C-RAN hubs to provide 5G fronthaul transport aggregation or be positioned at the backhaul for aggregating BBU pooling. It can also be programmed to be a Broadband Network Gateway (BNG) to enable the next generation broadband network. Equipped with high port density, Class C timing and fully supporting SyncE and IEEE 1588v2, our S9600-72XC is capable of fulfilling the role of any type of network aggregation.

Specializing in 5G Time Sensitive Networking applications, the S9600-72XC 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 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
- Streamline maintenance with redundant and hot swappable power and fan modules

### KEY FEATURES

- High density, 64x25G ports with additional 8x100G ports
- 2.4Tbps switching capacity with an 8-Core, 1.9GHz processor
- 4GB Packet buffer
- Hardware supports full SyncE and IEEE 1588v2
- 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

- ◆ 8 x 40/100G QSFP28 ports
- ◆ 64 x 1/10/25G SFP28 ports
- ◆ 2 x 10G SFP+ management ports
- ◆ 1 x RJ45 serial console port
- ◆ 1 x Micro USB serial console port
- ◆ 1 x 100/1000M RJ45 management port
- ◆ 1 x USB 3.0 Type-A port

Processor Intel Skylake-D 8-Core @ 1.9GHz

Memory 32GB DDR4 (Up to 64GB)

Storage 128GB SSD

ASIC Broadcom Qumran2c BCM88820  
Broadcom OP2 BCM16K (Premium)

BMC AST2400

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 OCXO  
ITU-T Synchronous Ethernet (SyncE)  
IEEE 1588v2 - Default, G.8275.1 G.8275.1,  
G.8275.2, SMPTE ST 2059-2+, T-GM, T-BC/OC, T-TC  
Time Sensitive Networking (TSN)

Chassis 2 RU, 436 x 609.6 x 87.7 mm  
(WxDxH)  
or 17.17" x 24" x 3.45"  
Weight: 15.19kg or 33.49lb

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: 100 to 240V, 12A  
DC input: -40 to -75V, 40A  
Typical power: 328 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 60950-1 IEC 62368-1 BSMI	EMC	FCC Part 15, Subpart B, Class A ICES-003, Class A EN 55032, Class A EN 55024 EN 55035 EN 62479 EN 50663 EN 300 386 EN 301 489 EN 303 413 BSMI MTCTE VCCI CISPR 32, Class A NEBS GR-1089, GR-3108
Environment	WEEE RoHS ETSI 300 019 ETSI 300 132-2 NEBS GR-63		

OP2 available for premium SKU only.  
Specifications are subject to change without notice.  
Contact our sales team for current configuration options.

# S9600-72XC

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S9600-72XC Front and Rear Views



## ACCESSORIES

### Compatible Transceivers Types

100G QSFP28 SR4, 100G QSFP28 LR4, 100G QSFP28 ER4, 100G QSFP28 ZR4, 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

