Cell Site Router



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The Edgecore CSR310 is a hardened open cell site gateway platform that is OCP Accepted and TIP DCSG Compliant. CSR310 features a combination of 1/10 Gbps, 25 Gbps, and 100 Gbps interfaces with optimized performance by utilizing merchant silicon, and standard x86 processor for access and aggregation networks.

With temperature hardened design, the CSR310 is able to operate at wide operational temperature range from -40°C to 65°C and it equipped with redundant/hot swappable power and fan modules that provides high availability and hassle-free maintenance. In particular, CSR310 supports stacking option for scalability, and redundancy in resilient network topology.

The CSR310 builds in industry leading network timing and synchronization functions that makes it ideal solution for current LTE and emerging 5G mobile backhaul network. The CSR310 is installed with ONIE (Open Network Install Environment) that provides the freedom of choice for the preferred NOS (Network Operating System) integration.

Key Features and Benefits

- Open cell site gateway platform for mobile backhaul networks.
- 20 x 1G/10G SFP+, 4 x 1G/10G/25G SFP28 and 3 x 100G QSFP28 fixed ports.
- Full line-rate Layer 2 or Layer 3 forwarding of 300 Gbps.
- High resilience in stacking configuration of two CSR310 units
- Support IEEE1588v2 and SyncE functions in hardware
- Rack mountable in standard 19" racks.
- Supports side-to-side airflow SKU.
- All ports and PSUs on front.
- Hot-swappable, load sharing, redundant AC/48VDC PSUs.
- Hot swappable 4+1 redundant fan modules.
- Management: Ethernet and console RJ-45 ports; USB storage port.
- Hardware switch pre-loaded with Open Network Install Environment (ONIE).
- Compatible with Open Network Linux (ONL).
- Open cell site gateway platform for mobile backhaul networks.









control





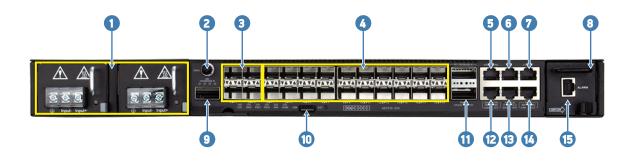
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Free Software Included

ONIC

Interfaces



Description						
1.	Power Supply	9.	1 x 100G QSFP28 port			
2.	GPS antenna port	10.	USB storage port			
3.	4 x 25G SFP28 ports	11.	2 x 100G QSFP28 stacking ports			
4.	20 x 10G SFP+ ports	12.	Stack Control RJ-45 port			
5.	Stack Sync RJ-45 port	13.	TOD RJ-45 port			
6.	BITS port	14.	Management port (MGMT)			
7.	RJ-45 console port	15.	Alarm RJ-45 port			
8.	Fan Tray					

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Ports

■ Switch Ports

20 x SFP+ (each supporting 10 GbE or 1 GbE)

4 x SFP28 (each supporting 1GbE, 10 GbE or 25 GbE)

 $3 \times 100G$ QSFP28 (each supporting 1 x 40/100 GbE or $4 \times 10/25$ GbE or 2×50 GbE)

■ Management Ports on Front Panel

1 x RJ-45 serial console

1 x RJ-45 1000BASE-T management Ethernet port (MGMT)

1 x USB

1 alarm I/O

■ Clocking and Timing ports

Station Clock Input and Output ports

PRTC: ITU-T G.8272

Pulse-per-Second (PPS) input and output

Time-of-Day (TOD) input

Integrated GNSS receiver

Stacking Interface

2 out of 3 100G QSFP28 can be used for stacking

1 x 1 GbE from CPU(control signal)

1 x RJ45 for sync signals

Optics and cables for stacking:

QSFP28 DAC up to 2 m

QSFP28 AOC up to 30 m

Key Components

■ Switch Silicon: Broadcom BCM88470 Qumran-AX

■ CPU module:

Processor: Intel® Denverton C3508 4 core

Memory: 16G RAM DDR4-2400

■ Stratum 3E compliant oscillator (OCXO)

■ SSD M.2, 32 Gbytes

Performance

■ 300 Gbps bidirectional switching capacity

■ 300 Mpps packet processing rate

 Scales to 600 Gbps per node in stacked configuration (2 x CSR310)

Physical and Environmental

■ Dimensions (WxDxH): 440 x 300 x 44 mm (17.32 x 11.81 x 1.73 in)

■ Weight 5.35 kg (11.79 lb), with two installed PSUs

■ Installations to standard 19", 21", 23", and ETSI 600 mm racks or cabinets as well as OCP 21" open racks

PSU

DC Input: 36V -72V, 10 AAC Input: 100V-240V, 5 A

■ Power Consumption :250 W(Maximum)

Software

■ Switch is loaded with Open Network Install Environment (ONIE)

■ Compatible with the following NOS options: Open Network Linux (ONL)

Regulatory Compliance

■ Safety Compatibility EN 62368-1:2014 + AC:2015 IEC 62368-1:2014

■ Electromagnetic Compatibility EN 300 386 V1.6.1 (2012–09)

Installation environment: telecommunication center

■ ITU-T K.80:07/2009

■ FCC 47 CFR Part 15, Subpart B, Class A

■ EN 301 489-1 V2.1.1

■ EN 301 489-19 V2.1.0

■ EN 303 413 V1.1.1

■ Radio Equipment Directive 2014/53/EU

Environmental

 Usage altitude 60 m below sea level (106 kPa air pressure) to 3000 m (70 kPa)

■ Storage: IEC60068-2-14

Temperature: -40°C to +70°C

■ Transportation: ETSI EN 300 019-1-2 Class 2.3
Temperature: -40°C to +70°C (-40°F to +158°F)
Operating Conditions: [ETSI EN 300 019-1-3] Class 3.2
Temperature range: -40°C to +65°C (-40°F to 149°F)
Relative humidity: 5% to 95%

The product complies with the current version of the following EU directives:

RoHS WEEE REACH

Warranty

Please check www.edge-core.com for the warranty terms in your country.

For More Information

To find out more about Edgecore Networks Corporation products and solutions, visit www.edge-core.com.

About Edgecore Networks Corporation

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Edgecore Networks Corporation is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edgecore data center switches are developed and manufactured by Accton.

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Ordering Information

Base model: AS7315-27X; Intel® Denverton C3508, 20 x 1G/10G SFP+, 4 x 1G/10G/25G SFP28 and 3 x 100G QSFP28 fixed ports. ONIE software installer.

Model Number	Part Number	PSU	Airflow	Region (power cord)
7315-27X-0-AC-S-US	F0PZZ5627400A-C	Dual AC PSUs	Side-to-Side airflow	US
7315-27X-0-AC-S-UK	F0PZZ5627300A-C	Dual AC PSUs	Side-to-Side airflow	UK
7315-27X-0-AC-S-EU	F0PZZ5627200A-C	Dual AC PSUs	Side-to-Side airflow	EU
7315-27X-0-AC-S-JP	F0PZZ5627500A-C	Dual AC PSUs	Side-to-Side airflow	JP
7315-27X-0-48X-S	F0PZZ5627004A-C	Dual DC PSUs	Side-to-Side airflow	N/A

Field replacement units

Model Number	Part Number	Description
CRXT-T0T12BS	131700000434A	AS7315-27X DC PSU (Black Housing)
SPAACTN-03BG	131700000453A	AS7315-27X AC PSU (Black Housing)
FAN-1U-1x1J-S	F0TZZ5627001A	AS7315-27X Fan Tray Spare Part

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