

CELL SITE ROUTER

AS7315-27X



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

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

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

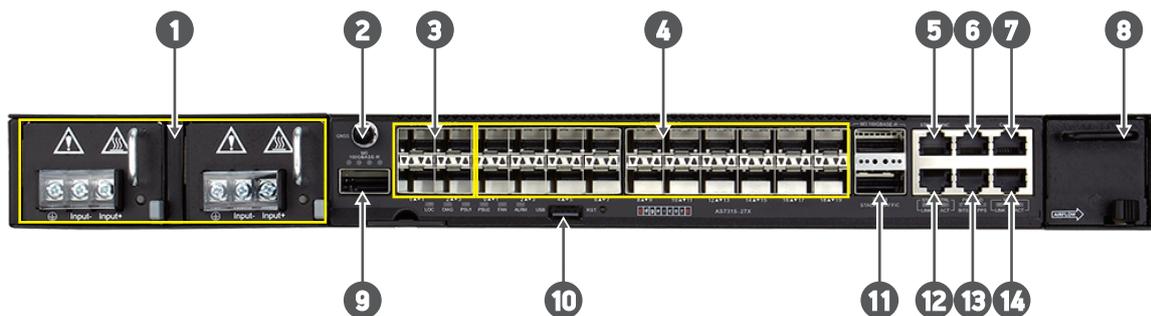
Key Features and Benefits

- 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 and Layer 3 forwarding at 300 Gbps.
- High resilience in a stacking configuration of two CSR310 units.
- Supports IEEE1588v2 and SyncE functions in hardware.
- Rack mountable in standard 19" racks.
- Supports side-to-side airflow SKU.
- All ports and PSUs are accessible at the front.
- Hot-swappable, load sharing, redundant AC and 48 VDC PSUs.
- Hot swappable 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).





Interfaces



Description	
1. Power supply	8. Fan tray
2. GNSS antenna input	9. 1 x 100G QSFP28 port
3. 4 x 25G SFP28 ports	10. USB storage port
4. 20 x 10G SFP+ ports	11. 2 x 100G QSFP28 stacking ports
5. Stack sync RJ-45 port	12. Stack control RJ-45 port
6. BITS port	13. TOD RJ-45 port
7. RJ-45 console port	14. Management port (MGMT)

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 x 100G QSFP28 (each supporting 1 x 40/100 GbE or 4 x 10/25 GbE or 2 x 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 (storage)
- Clocking and Timing Ports
 - Stacking 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 RJ-45 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® Atom 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
- Can be mounted in standard 19", 21", 23", and ETSI 600 mm racks or cabinets, as well as OCP 21" Open Racks

PSU

- DC Input: 36V -72V, 10 A
- AC Input: 100V-240V, 5 A
- Power Capacity: 300 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/IEC 62368-1
- Electromagnetic Compatibility
 - EN 300 386 V1.6.1
 - Installation Environment: Telecommunication center
 - ITU-T K.80
 - 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 (-40°F to 158°F)
- 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

Edgecore Networks Corporation is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edgecore Networks Corporation delivers the software and systems that transform the way the world connects. Edgecore Networks Corporation serves customers and partners worldwide. Additional information can be found at www.edge-core.com.

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.

To purchase Edgecore Networks solutions, please contact your Edgecore Networks Corporation representatives at +886 3 563 8888 (HQ) or +1 (949)-336-6801 or authorized resellers.

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Ordering Information

Base Model: AS7315-27X; Intel® Atom C3508 4-Core, 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	Dual AC PSUs	Side-to-Side Airflow	US
7315-27X-0-AC-S-UK	F0PZZ5627300A	Dual AC PSUs	Side-to-Side Airflow	UK
7315-27X-0-AC-S-EU	F0PZZ5627200A	Dual AC PSUs	Side-to-Side Airflow	EU
7315-27X-0-AC-S-JP	F0PZZ5627500A	Dual AC PSUs	Side-to-Side Airflow	JP
7315-27X-0-48X-S	F0PZZ5627004A	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