

Cell Site Gateway

Bare-Metal Hardware

AS7315-27X



TELECOM INFRA
PROJECT



The Edgecore AS7315-27X is an open cell site gateway platform that provides a combination of 1/10 Gbps, 25 Gbps, and 100 Gbps interfaces, and it utilizes merchant silicon, and an x86 processor with optimized performance for access and aggregation networks.

The AS7315-27X is a hardened design, able to operate at wide operational temperature range from -40°C to 65°C, and with redundant/hot swappable power modules and 4+1 fans that provide high availability and hassle-free maintenance for mission-critical applications. The AS7315-27X also supports network timing and synchronization in hardware that makes it ideal for current LTE and emerging 5G mobile backhaul network solutions.

The AS7315-27X is installed with ONIE (Open Network Install Environment) that provides freedom of choice for the preferred NOS (Network Operating System) integration with user's applications.

Key Features and Benefits

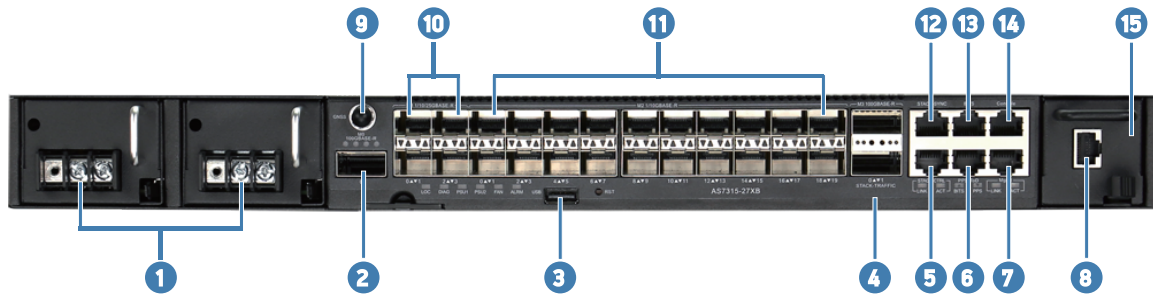
- Open cell site gateway platform for mobile backhaul networks.
- 20 x 1G/10G SFP+, 4 x 1G/10G/25G SFP28 and 3 x 100G QSFP28 fixed ports.
- Full line-rate Layer 2 or Layer 3 forwarding of 300 Gbps.
- Rack mountable in standard 19" racks.
- Supports side-to-side airflow SKU.
- All ports and PSUs on front.
- 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).
- Compatible with Infinera CNOS.



Software Supported



Interface



Description

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

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
 - 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
 - Two out of three 100G QSFP28 can be used for stacking
 - 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, 3 Gbytes of DDR4 memory
- CPU module: COM Express module type 7, Intel ATOM C3508 4 core @ 1.6GHz x86 processor, 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 AS7315-27X)

Supported Optics and Cables

- SFP
 - 100/1000BASE-TX
 - 1000BASE-SX up to 550 m
 - 1000BASE-LX up to 10 km
 - 1000BASE-EX up to 40 km
 - 1000BASE-ZX up to 80 km
- SFP+
 - 10GBASE-SR up to 300 m
 - 10GBASE-LR up to 10 km
 - 10GBASE-ER up to 40 km
 - 10GBASE-ZR up to 80 km
 - 10GDWDM Tunable 80 km
- SFP28
 - 25GBASE-SR up to 100 m
 - 25GBASE-LR up to 10 km
- QSFP28
 - 100GBASE-SR4 up to 100 m
 - 100GBASE-LR4 up to 10 km

Physical and Environmental

- Dimensions (WxDxH): 440 x 300 x 44 mm
- Installations to standard 19", 21", 23", and ETSI 600 mm racks or cabinets as well as OCP 21 inch open racks

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:
 - ETSI EN 300 019-1-1 Class 1.1
 - Temperature: -5°C to +45°C (+23°F to +113°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.

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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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