AGGREGATION ROUTER
AS5916-54XM

The Edgecore AGR120 is a deep-packet buffer router optimized for carrier access and aggregation and data center applications. Based on Broadcom's StrataDNX® Qumran MX™ ASIC, the device supports line-rate 800Gbps Layer 2 and Layer 3 functions and is equipped with a powerful Intel Xeon CPU. The AGR120 supports IEEE 802.1AE MACsec functionality delivering secure encrypted communications on the 10G downlink ports.

The AGR120 hardware comes with high-availability designs, including redundant, hot-swappable AC or -48 VDC PSUs. Fans are designed with 5+1 redundant fan modules with front-to-back or back-to-front airflow options. The Edgecore AGR120 meets the high-performance, availability, and scalability requirements of cloud data centers and communication service providers.

Key Features and Benefits

- High performance data center top-of-rack and carrier access/aggregation switch or edge router.
- 48 x SFP+ switch ports, supporting 10 GbE (DAC, AOC, 10GBASE-SR/LR) or 1 GbE (1000BASE-T/SX/LX).
- 6 x 100G QSFP28 or 6 x 40G QSFP ports at front.
- Support for IEEE 802.1AE MACsec encryption.
- Rack mountable in standard 19" racks.
- Hot-swappable, load sharing, redundant AC or 48 VDC PSUs.
- Hot swappable 5+1 redundant fan modules.
- Management: Ethernet and console RJ-45 ports; USB storage port.
- Hardware switch pre-loaded with Open Network Install Environment (ONIE) for automated loading of compatible open source and commercial NOS offerings.
- Compatible with Open Network Linux (ONL).
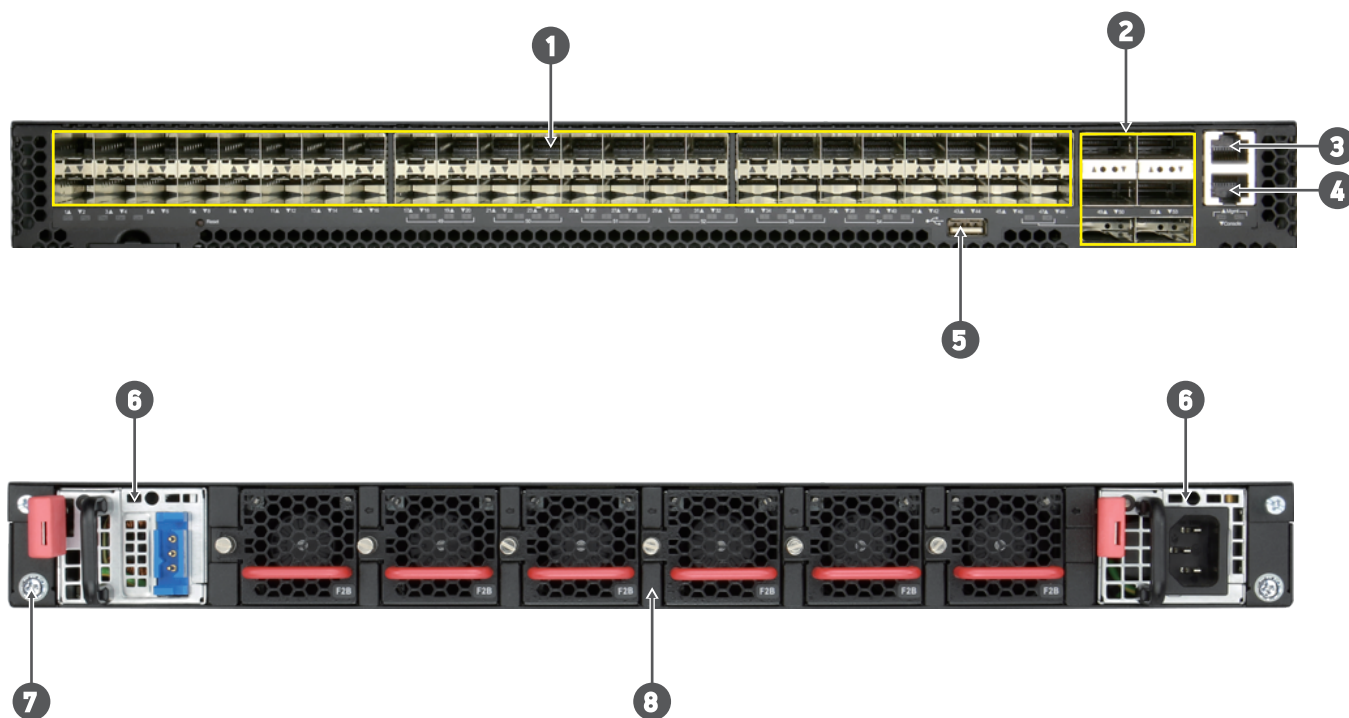
Freedom of choice

Greater control

Rapid innovation

Reduced CAPEX and OPEX

Free Software Included

ONIE

Interfaces

Description			
1.	48 x SFP+ ports	5.	USB storage port
2.	6 x QSFP28 ports	6.	DC or AC PSU
3.	RJ-45 management port	7.	Grounding screw
4.	RJ-45 console port	8.	5+1 redundant fans

Ports

- Switch Ports:
  48 x SFP+ each supporting 10 GbE or 1 GbE
  6 x 100G QSFP28 each supporting 1 x 40/100 GbE or
  6 x 40G QSFP each supporting 1 x 40 GbE or 4 x 10 GbE or 4 x 25 GbE
- Management Ports on Front Panel:
  1 x RJ-45 serial console
  1 x RJ-45 100/1000BASE-T management port
  1 x USB (storage)

Key Components

- Switch Silicon:
  Broadcom BCM88370 Qumran-MX
- CPU Module:
  Processor: Intel® Xeon® D-1518 4-core Processor
  Memory: DDR4: SO-DIMM 8 GB x 2
  m.2 SSD: 32 GB MLC

Performance

- Switching Capability: 800 Gbps
- Processing Rate: 700 Mpps

Supported Optics and Cables

- SFP+ Ports:
  10GBASE-CR DAC: Up to 3 m passive; up to 10 m active
  10GBASE-SRL/SR: Up to 100/300 m over OM3 MMF
  10GBASE-LR: Up to 10 km over SMF
  1000BASE-SX, 1000BASE-LX, 100/1000BASE-T
- QSFP+ Ports:
  40GBASE-CR4 DAC: Up to 3 m passive; up to 10 m active
  40GBASE-CR4 DAC: Up to 4 x SFP+ 10GBASE-CR DAC; up to 3 m
    passive; up to 10 m active
  40GBASE-SR4: Up to 100 m over OM3 MMF, 150 m over OM4 MMF
  40GBASE-LR4: Up to 10 km over SMF
  100GBASE-SR4: 100 Gbps short reach transceiver
  100GBASE-LR4: 100 Gbps long reach transceiver
  QSFP28 AOC Cable: 100 Gbps to 100 Gbps AOC cable with upto
    30 M 100G QSFP28 to 100 G QSFP28

Physical and Environmental

- Dimensions (WxDxH): 438.4x 609x 43.25 mm (17.26 x 23.98 x 1.70 in)
- Weight: 9.7 kg (21.38 lb), with two installed PSU modules
- Fans: Hot-swappable 5+1 redundant fans
- Operating Temperature: 0°C to 40°C (32°F to 104°F)
- Storage Temperature: -40°C to 70°C (-40°F to 158°F)
- Operating Humidity: 5% to 95% non-condensing

Software

- Switch is loaded with Open Network Install Environment (ONIE)
    software installer
- Compatible with the following NOS options: Open Network Linux
  (ONL)

Power

- PSUs: 2 redundant, load-sharing, hot-swappable AC or 48 VDC
  power input
- AC Input Range: 100 V~240 VAC
- DC Input Range: -36~-72 VDC

Regulatory Compliance

- Safety Compatibility
  CB
  UL/CUL
  CCC
  BSMI
- EMI
  CE Mark
  EN 55032 Class A
  EN55024
  EN 61000-3-2
  EN 61000-3-3
  FCC Part 15 Subpart B Class A
  VCCI Class A
  CCC
  BSMI
- Environmental Compliance
  NEBS GR63-CORE (Pre-test)
- RoHS 2.0 Compliant
- WEEE Standards: The switches complied with the following
  WEEE standards: Waste Electrical and Electronic Equipment
  (WEEE Directive 2002/96/EC)

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.

Ordering Information

Base Model: AS5916-54XM; Intel® Xeon® D-1518 4-Core, 48-Port 10G QSFP+ with 6 x 100G QSFP28 Uplinks; ONIE Software Installer.

Model Number	Part Number	PSU	Airflow	Region (Power cord)
AS5916-54XM-O-AC-F-US	FP1ZZ5654413A	Dual AC PSUs	Front-to-Back Airflow	N. America
AS5916-54XM-O-AC-B-US	FP1ZZ5654416A	Dual AC PSUs	Back-to-Front Airflow	N. America
AS5916-54XM-O-AC-F-EU	FP1ZZ5654215A	Dual AC PSUs	Front-to-Back Airflow	EU
AS5916-54XM-O-AC-B-EU	FP1ZZ5654216A	Dual AC PSUs	Back-to-Front Airflow	EU
AS5916-54XM-O-AC-F-UK	FP1ZZ5654315A	Dual AC PSUs	Front-to-Back Airflow	UK
AS5916-54XM-O-AC-B-UK	FP1ZZ5654316A	Dual AC PSUs	Back-to-Front Airflow	UK
AS5916-54XM-O-AC-F-JP	FP1ZZ5654515A	Dual AC PSUs	Front-to-Back Airflow	JP
AS5916-54XM-O-AC-B-JP	FP1ZZ5654516A	Dual AC PSUs	Back-to-Front Airflow	JP
AS5916-54XM-O-48V-F	FP1ZZ5654093A	Dual 48 VDC PSUs	Front-to-Back Airflow	NA