

# 10GbE/100GbE Aggregation Router

## Bare Metal Hardware

### AS5916-54XM

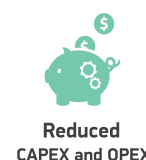


AS5916-54XM is a deep-packet buffer router optimized for carrier access and aggregation and data center applications. Based on Broadcom's StrataDNX<sup>®</sup> Qumran MX<sup>™</sup> ASIC, the device supports line-rate 800Gbps Layer 2 and Layer 3 functions and is equipped with a powerful Intel Xeon CPU. The AS5916-54XM supports IEEE 802.1AE MACSEC functionality delivering secure encrypted communications on the 10G downlink ports.

The AS5916-54XM 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 port-to-power or power-to-port airflow options. The Edgecore AS5916-54XM meets the high-performance, availability, and scalability requirements of cloud data centers and communication service providers.

## Key Features and Benefits

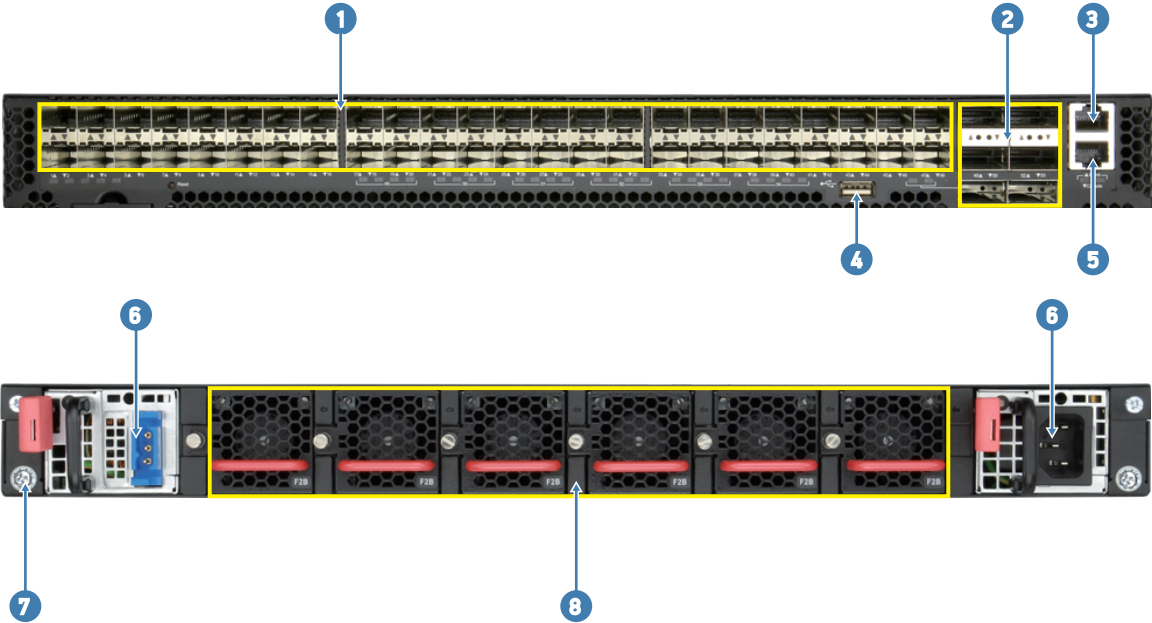
- High performance data center top-of-rack and carrier access/aggregation switch or edge router.
- 48 x SFP+ switch ports, supporting 10 GbE (DAC, AOC, 10GBASE-SR/LR) or 1 GbE (1000BASE-T/SX/LX).
- 6 x 100G QSFP28 or 6 x 40G QSFP ports at front.
- Support for IEEE 802.1AE MACsec encryption.
- Rack mountable 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).



Software Supported



Interfaces



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

## Key Components

- Switch Silicon:
  - Broadcom Qumran-MX BCM88370
- CPU Modules:
  - Intel® Xeon® D-1518 quad-core x86 Processor
  - DDR4: SO-DIMM 8 GB x 2
  - m.2 SSD: 32 GB MLC

## Performance

- Switching Capability: 800 Gbps
- Processing rate: 720 Mpps

## Supported Optics and Cables

- SFP+ Ports:
  - 10GBASE-CR DAC: up to 3 m passive; up to 10 m active
  - 10GBASE-SR/SR: up to 100/300 m over OM3 MMF
  - 10GBASE-LR: Up to 10 km over SMF
  - 100GBASE-SX, 100GBASE-LX, 100/1000BASE-T
- QSFP+ Ports:
  - 40GBASE-CR4 DAC: up to 3 m passive; up to 10 m active
  - 40GBASE-CR4 DAC 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 inch)
- 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, the open-source, OCP reference NOS

## Power

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

## Regulatory

- 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
- Safety
  - CB
  - UL/CUL
  - CCC
  - BSMI
- Environmental:
  - 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](http://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](http://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](http://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: AS5916-54XM; 48-Port 10G QSFP+ with 6 x 100G QSFP28 uplinks; ONIE software installer**

Model Number	CPU Module	PSU	Airflow	Region (power cord)
AS5916-54XM-O-AC-F-US	Intel® Xeon® D-1518 Processor	dual AC PSUs	port-to-power airflow	N. America
AS5916-54XM-O-AC-B-US	Intel® Xeon® D-1518 Processor	dual AC PSUs	power-to-port airflow	N. America
AS5916-54XM-O-AC-F-EU	Intel® Xeon® D-1518 Processor	dual AC PSUs	port-to-power airflow	Europe
AS5916-54XM-O-AC-B-EU	Intel® Xeon® D-1518 Processor	dual AC PSUs	power-to-port airflow	Europe
AS5916-54XM-O-AC-F-UK	Intel® Xeon® D-1518 Processor	dual AC PSUs	port-to-power airflow	UK
AS5916-54XM-O-AC-B-UK	Intel® Xeon® D-1518 Processor	dual AC PSUs	power-to-port airflow	UK
AS5916-54XM-O-AC-F-JP	Intel® Xeon® D-1518 Processor	dual AC PSUs	port-to-power airflow	Japan
AS5916-54XM-O-AC-B-JP	Intel® Xeon® D-1518 Processor	dual AC PSUs	power-to-port airflow	Japan
AS5916-54XM-O-48V-F	Intel® Xeon® D-1518 Processor	dual 48VDC PSUs	port-to-power airflow	NA