

## Aggregation Router AS5912-54X



The Edgecore AGR100 switch meets the high-performance, availability, and network-scaling requirements of cloud data centers and carrier access providers. The AGR100 provides switching at Layer 2 or Layer 3 across 48 x 10 GbE ports and 6 x 100 G uplinks. The switch can be deployed either as a Top-of-Rack switch, as part of a 100 GbE or 40 GbE distributed spine, forming a non-blocking folded-Clos data center fabric, or as a carrier access/aggregation switch. The switch is rack mountable in a standard 19 inch rack.

The AGR100 hardware provides high-availability features, including; redundant, hot-swappable AC or -48 VDC PSUs; fans with 5+1 redundant fan modules; and port-to-power or power-to-port airflow options.

### Key Features and Benefits

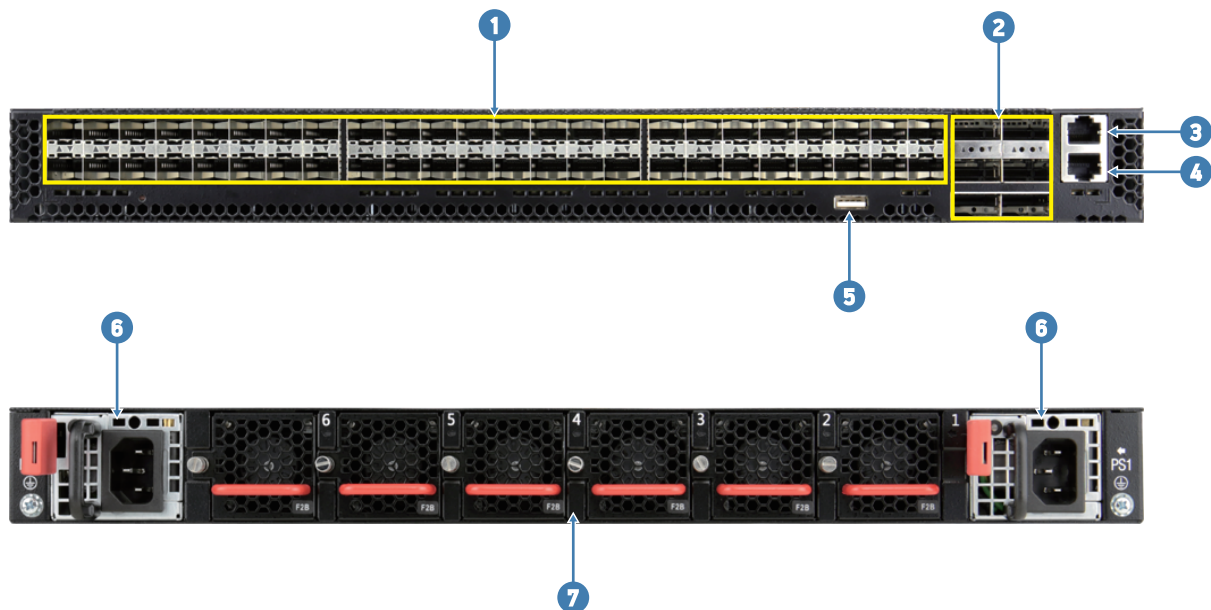
- Cost-effective, data center top-of-rack and carrier access/aggregation switch.
- 48 x SFP+ switch ports, supporting 10 GbE (DAC, AOC, 10GBASE-SR/LR) or 1 GbE (1000BASE-T/SX/LX).
- 6 x 100G QSFP28 ports at front.
- Rack mountable in standard 19" racks.
- Hot-swappable, load sharing, redundant AC or -48 VDC PSUs.
- Hot swappable 5+1 redundant fan modules.
- Management: Ethernet and console RJ-45 ports.
- 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).



Free Software Included

onle

## Interfaces



### Description

- |                           |                                       |
|---------------------------|---------------------------------------|
| 1. 48 x 1G/10G SFP+ ports | 5. USB storage port                   |
| 2. 6 x 100G QSFP28 ports  | 6. Power supply                       |
| 3. RJ-45 management port  | 7. Hot-swappable 5 + 1 redundant fans |
| 4. RJ-45 console port     |                                       |

## Ports

- Switch Ports:  
48 x SFP+ each supporting 10 GbE or 1 GbE  
6 x 100G QSFP28 each supporting 1 x 40/100 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 module:  
Processor: Intel Atom® C2538 4C 2.4GHz Processor  
Memory: DDR3 SO-DIMM 8 GB x 2  
mSATA: 32 GB

## Performance

- Switching Capability: 800 Gbps
- Forwarding Rate: 720 Mpps
- Jumbo Frame: 9 Kbytes
- 16MB on-chip buffering
- Deep DRAM buffering: 6 GB
- MAC Table (LEM): 750 k

## Supported Optics and Cables

- SFP+ Ports:  
10GBASE-CR DAC: up to 3 m passive; up to 10 m active  
10GBASE-SR/LR: up to 100/300 m over OM3 MMF  
10GBASE-LR: Up to 10 km over SMF  
10GBASE-ER: Up to 40 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 DAC Cable: 100GBASE-CR4 100 Gbps to 100Gbps Twinax DAC Cable

## Physical and Environmental

- Dimensions (WxDxH): 440 x 548 x 44 mm (17.32 x 21.57 x 1.73 in)
- Weight: 9.34 kg (20.59 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
- AC input range: 90 V ~ 240 VAC
- DC input range: -36 ~ -72 VDC
- AC 110V  
Minimum: 232 W  
Maximum: 327 W
- AC 220V  
Minimum: 231 W  
Maximum: 337 W
- DC 48V  
Minimum: 229 W  
Maximum: 349 W

## Regulatory Compliance

- Safety Compatibility  
CB  
UL/CUL
- EMI  
CE Mark  
EN55032 Class A  
EN55024  
EN61000-3-2  
EN61000-3-3  
FCC Part 15 Subpart B Class A  
VCCI Class A  
BSMI
- Environmental Compliance  
NEBS Level 1
- 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: AS5912-54X; Intel Atom® C2538, 48-Port 10G QSFP+ with 6 x 100G QSFP28 uplinks; ONIE software installer.**

Model Number	Part Number	PSU	Airflow	Region (power cord)
5912-54X-O-AC-F-US	FP3ZZ5654400A-C	Dual AC PSUs	Port-to-Power airflow	N. America
5912-54X-O-AC-B-US	FP3ZZ5654401A-C	Dual AC PSUs	Power-to-Port airflow	N. America
5912-54X-O-AC-F-EU	FP3ZZ5654201A-C	Dual AC PSUs	Port-to-Power airflow	EU
5912-54X-O-AC-B-EU	FP3ZZ5654200A-C	Dual AC PSUs	Power-to-Port airflow	EU
5912-54X-O-AC-F-UK	FP3ZZ5654301A-C	Dual AC PSUs	Port-to-Power airflow	UK
5912-54X-O-AC-B-UK	FP3ZZ5654300A-C	Dual AC PSUs	Power-to-Port airflow	UK
5912-54X-O-AC-F-JP	FP3ZZ5654501A-C	Dual AC PSUs	Port-to-Power airflow	JP
5912-54X-O-AC-B-JP	FP3ZZ5654500A-C	Dual AC PSUs	Power-to-Port airflow	JP
5912-54X-O-48V-F	FP3ZZ5654018A-C	-48V DC PSUs	Port-to-Power airflow	N/A
5912-54X-O-48V-B	FP3ZZ5654020A-C	-48V DC PSUs	Power-to-Port airflow	N/A