

AGGREGATION ROUTER

AS5912-54X



The Edgecore AGR100 router 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 router 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 router. The router 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 front-to-back or back-to-front airflow options.

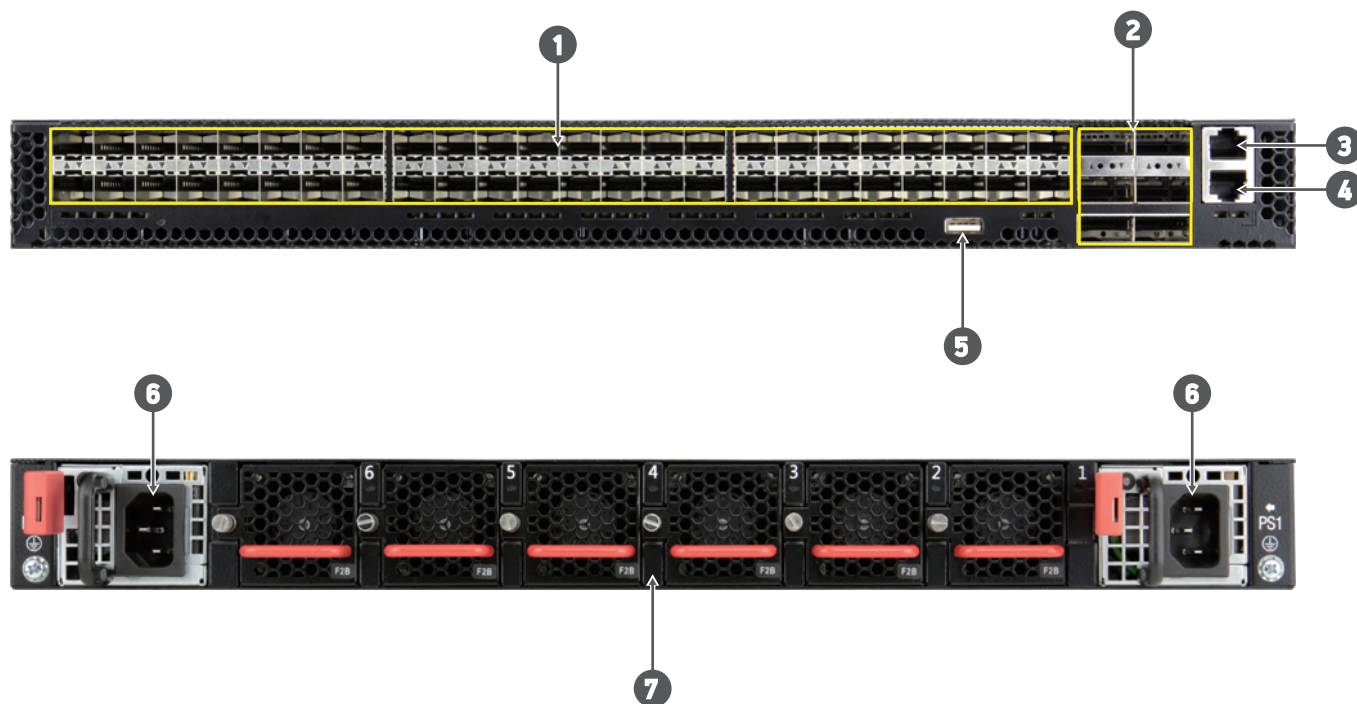
Key Features and Benefits

- Cost-effective, data center top-of-rack switch and carrier access/aggregation 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 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 router 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).





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

- Interfaces:
 - 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 (storage)

Key Components

- Silicon:
 - Broadcom BCM88370 Qumran-MX
- CPU module:
 - Processor: Intel Atom® C2538 4-Core 2.4GHz Processor
 - Memory: DDR3 SO-DIMM 8 GB x 2
 - mSATA: 32 GB

Performance

- 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-SRL/SR: Up to 100/300 m over OM3 MMF
 - 10GBASE-LR: Up to 10 km over SMF
 - 10GBASE-ER: Up to 40 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 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

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 device 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.

© Copyright 2024 Edgecore Networks Corporation. The information contained herein is subject to change without notice. This document is for informational purposes only and does not set forth any warranty, expressed or implied, concerning any equipment, equipment feature, or service offered by Edgecore Networks Corporation. Edgecore Networks Corporation shall not be liable for technical or editorial errors or omissions contained herein.

Ordering Information

Base Model: AS5912-54X; Intel Atom® C2538 4-Core, 48-Port 10G QSFP+ with 6 x 100G QSFP28 Uplinks; ONIE Software Installer.

Model Number	Part Number	PSU	Airflow	Region (Power Cord)
5912-54X-0-AC-F-US	FP3ZZ5654400A	Dual AC PSUs	Front-to-Back Airflow	N. America
5912-54X-0-AC-B-US	FP3ZZ5654401A	Dual AC PSUs	Back-to-Front Airflow	N. America
5912-54X-0-AC-F-EU	FP3ZZ5654201A	Dual AC PSUs	Front-to-Back Airflow	EU
5912-54X-0-AC-B-EU	FP3ZZ5654200A	Dual AC PSUs	Back-to-Front Airflow	EU
5912-54X-0-AC-F-UK	FP3ZZ5654301A	Dual AC PSUs	Front-to-Back Airflow	UK
5912-54X-0-AC-B-UK	FP3ZZ5654300A	Dual AC PSUs	Back-to-Front Airflow	UK
5912-54X-0-AC-F-JP	FP3ZZ5654501A	Dual AC PSUs	Front-to-Back Airflow	JP
5912-54X-0-AC-B-JP	FP3ZZ5654500A	Dual AC PSUs	Back-to-Front Airflow	JP
5912-54X-0-48V-F	FP3ZZ5654018A	-48V DC PSUs	Front-to-Back Airflow	N/A
5912-54X-0-48V-B	FP3ZZ5654020A	-48V DC PSUs	Back-to-Front Airflow	N/A