

## AS4610 Series 1GbE Data Center Switch Bare-Metal Hardware



### Product Overview





The AS4610 series is a high-performance Gigabit Ethernet Layer 3 switch family featuring 30 or 54 ports; AS4610-30T and AS4610-54T with 24/48 10/100/1000BASE-T ports, 4 x 10G SFP+ uplink ports and 2 x 20G QSFP+ stacking ports; AS4610-30P and AS4610-54P with 24/48 10/100/1000BASE-T ports, 4 x 10G SFP+ uplink ports and 2 x 20G QSFP+ stacking ports plus 24/48 10/100/1000BASE-T ports fully support IEEE 802.3at and IEEE 802.3af

AS4610-54T is ideal for data center top-of-rack switch or IPMI switch, including FAN-less design, redundant hot-swappable AC PSUs and port-to-power airflow. AS4610-30T, AS4610-30P and AS4610-54P are ideal for Campus Networking and AS4610-30P/AS4610-54P can provide up to 30 Watts per port of power to attached devices (eight ports support UPoE up to 60W), such as VoIP phones, wireless access points, surveillance cameras, etc, to fully utilizing existing Cat. 5 cable infrastructure.

### Key Features and Benefits

- Cost-effective, bare-metal infrastructure for data center racks.
- 1 GbE connection to server and storage nodes in rack, with 10 GbE uplinks to spine network.
- 24/48 x 10/100/1000BASE-T RJ-45 ports.
- 4 x SFP+ uplink ports, supporting 10 GbE (DAC, 10GBASE-SR/LR/ER/LRM) or 1 GbE (1000BASE-T/SX/LX).
- Full line-rate L2 or L3 forwarding of 128 Gbps.
- Support hot/cold aisle with port-to-power and power-to-port airflow SKUs.
- Energy efficiency: Maximum 99.1 W power consumption.
- Hot-swappable, load-sharing, redundant AC PSUs
- Hardware switch pre-loaded with Open Network Install Environment (ONIE) for automated loading of compatible independent SwitchOS software.
- Compatible with Cumulus®Linux® software from Cumulus Networks™.
- Compatible with PicOS™ r2.6.2 and later version from Pica8 Inc.

## Features

Product Model		AS4610-30T	AS4610-30P	AS4610-54T	AS4610-54P
Product Image					
Port	RJ-45 10/100/1000 Ports	24	24	48	48
	10G SFP+ Uplink Ports	4	4	4	4
	20G QSFP+ Stacking Ports	2	2	2	2
	PoE Ports	X	24	X	48
	Micro USB Console Port	O	O	O	O
Performance	Switching Capacity	128 Gbps	128 Gbps	128 Gbps	128 Gbps
	Forwarding Rate	191 Mpps	191 Mpps	191 Mpps	191 Mpps
	Memory	2 G	2 G	2 G	2 G
	SPI Flash	8 MB	8 MB	8 MB	8 MB
	NAND Flash	8 GB	8 GB	8 GB	8 GB
	MAC Address Table Size	96 K	96 K	96 K	96 K
	Jumbo Frames	12 KB	12 KB	12 KB	12 KB
PoE	IEEE 802.3af (15 W)	X	24	X	48
	IEEE 802.3at (30 W)	X	24	X	48
	UPoE (60 W)	X	8	X	8
	PoE Power Budget	X	960 W	X	1650 W
Mechanical	Rack Space	19"	19"	19"	19"
	Dimension (W x D x H) cm	44 x 35 x 4.5	44 x 35 x 4.5	44 x 35 x 4.5	44 x 35 x 4.5
	Weight	5.16 kg	6.02 kg	5.38 kg	6.36 kg
Power Supply	100-240 VAC, 50-60 Hz	O	O	O	O
	Max System Power Consumption (Watts)	76.1 W	81.72 W	92.2 W	99.1 W
Environmental	Operating Temperature	0°C to 45°C	0°C to 45°C	0°C to 45°C	0°C to 45°C
	Operating Humidity (non-condensing)	5% to 95%	5% to 95%	5% to 95%	5% to 95%
	Environmental Regulation compliance: WEEE	O	O	O	O
	Environmental Regulation compliance: RoHS	O	O	O	O
Certification	FCC Class A	O	O	O	O
	CE	O	O	O	O
	Safety Compliance: CB	O	O	O	O
	Safety Compliance: UL	O	O	O	O
	CCC	X	X	X	O
	BSMI	O	O	O	O

## Features

### Ports

- Switch Ports:
  - 24/48 x RJ-45 100/1000BASE-T ports
  - 4 x 10G SFP+ ports supporting 10G or 1G
  - 2 x 20G QSFP+ Stacking Port (requires Switch OS to support Hardware Stacking Feature)
- Management Ports on front (port) side:
  - 1 x Micro USB serial console
  - 1 x RJ-45 100/1000BASE-T management
  - 1 x USB Type A storage port

### Key Components

- Switch Silicon: Broadcom BCM56342 Helix4
- CPU: Dual-core ARM Cortex A9 1GHz
- Memory: 2 GB DDR3 SDRAM ECC
- Flash: 8 MB SPI Flash, 8 GB NAND Flash

### Performance

- Wire Speed Forwarding: L2 and L3
- Switching Capacity: 128 Gbps
- MAC Addresses: up to 96K
- VLAN IDs: 4K
- Jumbo Frames (9216 Bytes)
- L3 Hosts: up to 176K
- L3 Routes IPv4 12K, IPv6 6K
- Packet Buffer Size: 4 MB shared buffer pool

### Supported Optics and Cables

- GE RJ-45 Ports: Cat 5/5e/6 up to 100 m
- SFP+ Ports:
  - 10GBASE-CR DAC; 0.5 m to 7 m
  - 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 Port on Optional Module:
  - 40GBASE-CR4 DAC; 0.5 m to 7 m
  - 40GBASE-SR4; up to 100 m over OM3 MMF, 150 m over OM4 MMF
  - 40GBASE-SR4 to 4x10GBASE-SR; 100 m over OM3, 150 m OM4
  - 40GBASE-LR4; up to 10 km over SMF

### Physical and Environmental

- Dimensions (HxWxD): 4.5 x 44 x 35 cm (1.7 x 17.3 x 16.1") 1 RU
- Weight
  - AS4610-30T: 5.16 kg (11.37 lbs)
  - AS4610-30P: 6.02 kg (13.27 lbs)
  - AS4610-54T: 5.38 kg (11.86 lbs)
  - AS4610-54P: 6.36 kg (14.02 lbs)
- Fans:
  - AS4610-30T / AS4610-54T: Fan-less
  - AS4610-30P / AS4610-54P: 1 fixed fan
- Operating Temperature: 0°C to 45°C
- Storage Temperature: -40°C to 70°C
- Operating Humidity: 5% to 95% non-condensing
- PSUs: 2 redundant, load-sharing, hot-swappable AC
- Input Voltage: 90 to 264 VAC at 50-60 Hz. -48 to -72 VDC.
- Input Current: Max 13A @100/120 VAC, 3 A @200/240 VAC, 10 A @-72 VDC, 12 VDC power input option
- 12 VDC power input option
- Typical Power: 122 W, line-rate, 48 x 1 GbE Cat 6, 4 x 10GBASE-SR

### Regulatory

- EMI:
  - CE Mark (EN55022 Class A)
  - FCC Part 15 Class A
  - VCCI Class A
  - CCC GB9254-2008 (AS4610-54P only)
  - BSMI (CNS13438)
- Environmental:
  - Temperature: IEC 68-2-14
  - Shock: IEC 68-2-29
  - Vibration: IEC 68-2-36, IEC 68-2-6
  - Drop: ISTA 2A
- RoHS-6 Compliant
- Safety:
  - UL (CSA 22.2 No 60950-1 & UL 60950-1)
  - CB (IEC/EN60950-1)
  - CCC GB4943-2011 (AS4610-54P only)
  - BSMI (CNS14336)
- Country of Origin: Taiwan (TAA Compliant)

### LEDs

- GE RJ-45 SFP+ Port LEDs: Link Speed, Link Status, Activity
- 10G SFP+ Port LEDs: Link Speed, Link Status, Activity
- Ethernet Management Port LED: Link Status, Activity
- System LEDs: PRI, PSU1, PSU2, STK1, STK2, FAN, PoE

### Software

- Switch is loaded with Open Network Install Environment (ONIE) software installer
- Compatible with the following switchOS software
  - Cumulus@Linux@ software from Cumulus Networks™
  - PicOS™ r2.6.2 and later version from Pica8 Inc

### Warranty

- Please check [www.edge-core.com](http://www.edge-core.com) for the warranty terms in your country. The warranty provides return-to-factory hardware replacement for a three year period in North America.

### For More Information

- To find out more about Edge-Core Networks products and solutions, visit [www.edge-core.com.au](http://www.edge-core.com.au)

### About Edge-Core Networks

- Edge-Core Networks is in the business of providing innovative network solutions. In the service provider network, in the data center or in the cloud, Edge-Core Networks delivers the software and systems that transform the way the world connects. Edge-Core Networks serves customers and partners worldwide. Additional information can be found at [www.edge-core.com.au](http://www.edge-core.com.au).

- Edge-Core Networks is a subsidiary of Accton Technology Corporation, the leading network ODM company. The Edge-Core data center switches are developed and manufactured by Accton.

- To purchase Edge-Core solutions, please contact your Edge-Core Network representatives on 1300 725 323.

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## Ordering Information

<b>Base Model: AS4610 Series with ONIE software Installer</b>			
<b>Model Number</b>	<b>PSU</b>	<b>Airflow</b>	<b>Region (power cord)</b>
4610-54T-O-AC-F-US	dual AC PSUs	port-to-power airflow	N. America
4610-54T-O-AC-F-EU	dual AC PSUs	port-to-power airflow	Europe
4610-54T-O-AC-F-UK	dual AC PSUs	port-to-power airflow	UK
4610-54T-O-AC-F-JP	dual AC PSUs	port-to-power airflow	Japan
4610-54P-O-AC-F-US	dual AC PSUs	port-to-power airflow	N. America
4610-54P-O-AC-F-EU	dual AC PSUs	port-to-power airflow	Europe
4610-54P-O-AC-F-UK	dual AC PSUs	port-to-power airflow	UK
4610-54P-O-AC-F-JP	dual AC PSUs	port-to-power airflow	Japan
4610-30T-O-AC-F-US	dual AC PSUs	port-to-power airflow	N. America
4610-30T-O-AC-F-EU	dual AC PSUs	port-to-power airflow	Europe
4610-30T-O-AC-F-UK	dual AC PSUs	port-to-power airflow	UK
4610-30T-O-AC-F-JP	dual AC PSUs	port-to-power airflow	Japan
4610-30P-O-AC-F-US	dual AC PSUs	port-to-power airflow	N. America
4610-30P-O-AC-F-EU	dual AC PSUs	port-to-power airflow	Europe
4610-30P-O-AC-F-UK	dual AC PSUs	port-to-power airflow	UK
4610-30P-O-AC-F-JP	dual AC PSUs	port-to-power airflow	Japan
PSU-AC-150W-F	150W AC Power Supply FRU	port-to-power airflow	no power cord
PSU-AC-600W-F	600W AC Power Supply FRU	port-to-power airflow	no power cord
PSU-AC-900W-F	900W AC Power Supply FRU	port-to-power airflow	no power cord

<b>Model Number</b>	<b>Description</b>
4610-54T-SVC-RTF	AS4610-54T Annual Hardware Service, Return-to-Factory-- option for after warranty period
CBL-PWR-US	AC Power Cable - US (125V/13A, 1830mm) – only required with spare power supplies
CBL-PWR-EU	AC Power Cable - Europe (250V/10A, 1830mm) – only required with spare power supplies
CBL-PWR-UK	AC Power Cable - UK (250V/10A, 1830mm) – only required with spare power supplies
CBL-PWR-JP	AC Power Cable - Japan – only required with spare power supplies