

GS950 Series

Gigabit WebSmart Edge Switches

The Allied Telesis GS950 Series of WebSmart network switches demonstrates the Allied Telesis commitment to environmentally-friendly processes and products, minimizing power consumption through the use of a high efficiency power supply and a low power chipset. Featuring PoE+, GS950 Series switches at the network edge are the ideal cost-effective solution for small businesses.



Ease of management and high performance

These advanced Allied Telesis WebSmart switches combine the simplicity of unmanaged switches with the performance and reliability of managed switches. This provides a cost-effective, secure and reliable solution for integrated management at the network edge. With user-friendly web-based management, the GS950 Series is ideal for integrating simple management and security into your network solution.

Power over Ethernet (PoE)

The GS950/8POE, 10PS, 16PS, 28PS, 48PS switches are available in PoE configurations. What's more, the GS950/10PS, 16PS, 28PS, 48PS switches support PoE+ (IEEE 802.3at), with the capability of delivering up to 30W per port.

PoE allows users to connect and power a device using a single Ethernet cable, thus eliminating the need for additional power outlets and simplifying installation. Furthermore, this system is unaffected by any local variance in AC power, offering a standardized power infrastructure.

Key Features

VLAN

- ▶ IEEE 802.1Q tagged
- ▶ Port-based
- ▶ Up to 256 groups

Quality of Service Classification

- ▶ IEEE 802.1p tagging
- ▶ Port-based priority
- ▶ Four priority queues per port

IP Multicast Support (IPv4)

- ▶ IGMP snooping (v1/v2)
- ▶ Static multicast group (up to 256)
- ▶ Spanning-Tree, IEEE 802.1d/w/s

IEEE 802.3ad Link Aggregation

- ▶ Manual
- ▶ LACP (not on GS950/8, 16, 24, 48)

IEEE 802.1x Port-based, MAC-based and Network Access Control

- ▶ Local authentication server (MD5 only)
- ▶ Remote authentication through RADIUS
- ▶ Dynamic VLAN assignment
- ▶ RADIUS Client

Other

- ▶ IEEE 802.3x flow control or HOL* blocking prevention (* when flow control is off)
- ▶ Port mirroring
- ▶ Destination MAC filtering
- ▶ Ingress/egress rate limiting
- ▶ Broadcast storming control
- ▶ 100 FX SFP support
- ▶ Jumbo Frames - up to 10K

Management Features

- ▶ Web-based configuration
- ▶ SNMP trap view
- ▶ LLDP
- ▶ Firmware upgrade by FTP and HTTP
- ▶ Configuration backup/restore by FTP and HTTP
- ▶ Factory reset
- ▶ Password access control and restricted
- ▶ IP access list
- ▶ SNMPv1/v2c/v3
- ▶ DHCP client
- ▶ Syslog support
- ▶ System time configuration (SNTP, manual)
- ▶ Statistics Charts in Web

MIBs

- ▶ RFC 1213 MIB-II
- ▶ RFC 1643 Ethernet MIB
- ▶ RFC 1493 Bridge MIB
- ▶ RFC 2131 DHCP client
- ▶ Private Enterprise MIB (Allied Telesis provides the spec)

RMON Groups (1, 2, 3, 9)

- ▶ Stats
- ▶ History
- ▶ Alarms
- ▶ Events

ACL

- ▶ 240 entries (shared)

Specifications

PRODUCT	SWITCHING CAPACITY	FORWARDING RATE	HEIGHT	WIDTH	DEPTH	WEIGHT
AT-GS950/8	16Gbps	11.90Mpps	44 mm (1.73 in)	280 mm (11.02 in)	180 mm (7.09 in)	1.50 Kg (3.30 lbs)
AT-GS950/8POE	16Gbps	11.90Mpps	43 mm (1.70 in)	330 mm (13.00 in)	230 mm (9.06 in)	2.54 Kg (5.60 lbs)
AT-GS950/10PS	20Gbps	14.88Mpps	44 mm (1.73 in)	330 mm (13.00 in)	200 mm (7.90 in)	1.90 Kg (4.20 lbs)
AT-GS950/16	32Gbps	23.40Mpps	44 mm (1.73 in)	330 mm (13.00 in)	200 mm (7.90 in)	2.10 Kg (4.60 lbs)
AT-GS950/16PS	32Gbps	23.80Mpps	44 mm (1.73 in)	430 mm (17.00 in)	250 mm (9.80 in)	3.56 Kg (7.85 lbs)
AT-GS950/24	48Gbps	35.70Mpps	44 mm (1.73 in)	330 mm (13.00 in)	200 mm (7.90 in)	2.30 Kg (5.10 lbs)
AT-GS950/28PS*	56Gbps	41.65Mpps	44 mm (1.73 in)	450 mm (17.71 in)	250 mm (9.80 in)	3.60 Kg (7.93 lbs)
AT-GS950/48	96Gbps	71.20Mpps	43.2 mm (1.70 in)	444 mm (17.48 in)	257 mm (10.12 in)	4.10 Kg (9.00 lbs)
AT-GS950/48PS	96Gbps	71.42Mpps	44 mm (1.73 in)	440 mm (17.32 in)	430 mm (17.00 in)	6.62 Kg (14.60 lbs)

*Available Q3 2016

Power characteristics

PRODUCT	MAXIMUM PoE POWER	MAXIMUM PoE PORTS SUPPORTED			NOISE	VOLTAGE	FREQUENCY
		CLASS 2	CLASS 3	CLASS 4			
AT-GS950/8	-	-	-	-	Fanless	100-240V AC	50-60Hz
AT-GS950/8POE	61.6W	4	4	-	Fanless	90-240V AC	50-60Hz
AT-GS950/10PS	75W	8	4	2	Fanless	100-240V AC	50-60Hz
AT-GS950/16	-	-	-	-	Fanless	100-240V AC	50-60Hz
AT-GS950/16PS	185W	16	12	6	Low-speed 33 dB High-speed 47.1 dB	100-240V AC	50-60Hz
AT-GS950/24	-	-	-	-	Fanless	100-240V AC	50-60Hz
AT-GS950/28PS*	185W	24	12	4	Low-speed 35.6 dB High-speed 49.1 dB	100-240V AC	50-60Hz
AT-GS950/48	-	-	-	-	Low-speed 33 dB High-speed 47.1 dB	100-240V AC	50-60Hz
AT-GS950/48PS	370W	24	24	12	Low-speed 38.3 dB High-speed 51.6 dB	100-240V AC	50-60Hz

*Available Q3 2016

Performance

14,880pps for 10Mbps Ethernet
 148,800pps for 100Mbps Ethernet
 1,488,000pps for 1000Mbps Ethernet
 MAC addresses: 8K
 VLAN IDs available: 4K
 Max VLANs: 256
 Packet buffer: 1MB
 DRAM: 64MB
 Flash: 16MB

Interface connections

10/100/1000T: RJ-45
 SFP: 100TX, 100FX, 1000T,
 1000SX or 1000LX

Technical specifications

Wall-mount or desktop
 All units come with wall /19 in rack-mount brackets

Environmental specifications

Operating temperature: 0°C to 40°C (32°F to 104°F)
 Non-operating temperature: -25°C to 70°C (-13°F to 158°F)
 Operating humidity: 5% to 90% non-condensing
 Storage humidity: 5% to 95% non-condensing
 Vibration: IEC 68-2-36
 Shock: IEC 68-2-29
 Drop: IEC 68-2-32
 Flammability: UL94V-0
 (GS950/10PS, 16PS, 28PS, 48PS only)

Environmental compliance

RoHS
 China RoHS
 WEEE
 Eu-RoHS (GS950/10PS, 16PS, 28PS, 48PS only)

Electrical/mechanical approvals

GS950/8, 8POE, 16, 24, 48
 UL 1950
 FCC/EN55022 Class A
 VCCI Class A
 C-Tick
 EN60950 (TUV)
 EN55024
 CE
 CSA / CUL

GS950/10PS, 16PS, 28PS, 48PS

UL60950-1 2nd edition (UL)
 FCC/EN55022/CISPR 22 Class A
 VCCI Class A
 C-Tick
 EN60950 (TUV)
 EN55024
 CE Mark
 CSA / CUL

Standards and compliance

RFC792 ICMP
 RFC1213 MIB-II
 RFC1350 TFTP
 RFC1492 TACACS
 RFC1769 SNTP (Simple Network Time Protocol)
 RFC2131 DHCP client
 RFC2236 IGMP
 RFC2461 NDP (Neighbor Discovery protocol)
 RFC2616 HTTP
 RFC2866 RADIUS
 RFC4330 SNTP
 RFC5343 SNMP
 RFC6101 SSL
 IEEE 802.3 CSMA/CD
 IEEE 802.3i 10T
 IEEE 802.3u 100TX
 IEEE 802.3z 1000SX/LX
 IEEE 802.3z/ab 1000T
 IEEE 802.3x Flow control
 IEEE 802.1p Prioritization (four queues)
 IEEE 802.1x Authentication
 IEEE 802.1x Local authentication server(MD5)
 IEEE 802.1x Remote authentication through RADIUS
 IEEE 802.1x Dynamic VLAN assignment
 IEEE 802.1x MAC-based authentication
 IEEE 802.1x RADIUS
 IEEE 802.1d Bridging

IEEE 802.3ad Link aggregation
 IEEE 802.3ad Port trunking and LACP
 IEEE 802.1Q Tagged VLAN
 IEEE 802.1d Spanning-Tree
 IEEE 802.1w Rapid Spanning-Tree
 IEEE 802.1s Multiple Spanning-Tree
 IEEE 802.3af PoE
 IEEE 802.3at PoE+
 IEEE 802.3az Energy Efficient Ethernet



Ordering information

AT-GS950/8-xx

8-port 10/100/1000T eco-friendly WebSmart switch with 2 SFP combo ports

AT-GS950/16-xx

16-port 10/100/1000T eco-friendly WebSmart switch with 2 SFP combo ports

AT-GS950/24-xx

24-port 10/100/1000T eco-friendly WebSmart switch with 4 SFP combo ports

AT-GS950/48-xx

48-port 10/100/1000T eco-friendly WebSmart switch with 4 SFP combo ports

AT-GS950/8POE-xx

8 port 10/100/1000T PoE fanless WebSmart switch with 2 SFP combo ports

AT-GS950/10PS-xx

10-port 10/100/1000T WebSmart switch with 2 SFP combo ports and PoE+

AT-GS950/16PS-xx

16-port 10/100/1000T WebSmart switch with 2 SFP combo ports and PoE+

AT-GS950/28PS-xx*

24-port 10/100/1000T WebSmart switch with 4 SFP ports and PoE+

AT-GS950/48PS-xx

48-port 10/100/1000T WebSmart switch with 4 SFP combo ports and PoE+

Package contents

Switch unit
 Rack-mount brackets and screws
 Power cord
 Rubber feet
 User manual/install guide on CD (GS950/8POE only)

*Available Q3 2016

Small Form Pluggable Optics Modules

AT-SPSX

SFP, MMF, 1000Mbps, 220/500 m, 850 nm, LC

AT-SPLX10

SFP, SMF, 1000Mbps, 10 km, 1310 nm, LC

AT-SPFX/2

SFP, MMF, 100Mbps, 2 km, 1310 nm, LC

AT-SPFX/15

SFP, SMF, 100Mbps, 15 km, 1310 nm, LC

AT-SPBD10-13

SFP, SMF, 1000Mbps, 10 km, 1310/1490 nm, LC-BiDi

AT-SPBD10-14

SFP, SMF, 1000Mbps, 10 km, 1490/1310 nm, LC-BiDi

Where xx = 10 for US power cord
 20 for no power cord
 30 for UK power cord
 40 for Australian power cord
 50 for European power cord