

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
- ▶ CLI configuration on GS950PS Series
- ▶ 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)

Power characteristics 100-240V AC, 50-60Hz(GS950/8POE: 90-240V)

PRODUCT	NO POE LOAD			FULL POE+ LOAD		
	MAX POWER CONSUMPTION (W)	MAX HEAT DISSIPATION (BTU/HR)	MAX NOISE (DB)	MAX POWER CONSUMPTION (W)	MAX HEAT DISSIPATION (BTU/HR)	MAX NOISE (DB)
AT-GS950/8	8.7	29.69	Fanless	-	-	-
AT-GS950/8POE	10	34.12	Fanless	87.5	298.56	Fanless
AT-GS950/10PS	14.44	49.27	Fanless	92.7	316.31	Fanless
AT-GS950/16	12.92	44.08	Fanless	-	-	-
AT-GS950/16PS	21.8	74.38	47 dB@98% >25C 38.2dB@52% <25C	228.5	779.67	47 dB@98% >25C 38.2dB@52% <25C
AT-GS950/24	17.35	59.20	Fanless	-	-	-
AT-GS950/28PS	28.6	97.59	58.5dB >25C 55.2dB <25C	238	812.09	58.5dB >25C 55.2dB <25C
AT-GS950/48	42.97	146.62	47dB@98% >25C 38.5dB@58% <25C	-	-	-
AT-GS950/48PS	55.6	189.72	51.6dB >25C 38.7dB <25C	446	1521.82	51.6dB >25C 38.7dB <25C

Note: Noise value is controlled by ambient temperature over 25C or not. If it's over 25C, FAN run in high speed setting. It's not related to POE loading.

PRODUCT	POE POWER BUDGET(W)	MAX POE ENABLED PORTS AT 7.5W PER PORT	MAX POE ENABLED PORTS AT 15.4W PER PORT	MAX POE+ ENABLED PORTS AT 30W PER PORT
AT-GS950/8POE	61.6	4	4	-
AT-GS950/10PS	75	8	4	2
AT-GS950/16PS	185	16	12	6
AT-GS950/28PS	185	24	12	4
AT-GS950/48PS	370	24	24	12

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 45°C (32°F to 113°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)

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