

# GS950 V2 Series

## Gigabit WebSmart Edge Switches

The Allied Telesis GS950 V2 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 V2 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 V2 Series is ideal for integrating simple management and security into your network solution.

### Power over Ethernet (PoE)

The GS950/10PS V2, 18PS V2, 28PS V2 and 52PS V2 switches are available in 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

### 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

- ▶ SSH
- ▶ Telnet
- ▶ Web-based configuration
- ▶ CLI configuration<sup>1</sup>
- ▶ 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

- ▶ Support (number of entries 188)

<sup>1</sup> CLI can only be used for upgrading firmware, downloading configuration, and showing command

## Specifications

### Product specifications

PRODUCT	10/100/1000T COPPER PORTS	100/1000X SFP PORTS	TOTAL PORTS	POE+ ENABLED PORTS	SWITCHING FABRIC	FORWARDING RATE
GS950/10PS V2	8	2	10	8	20Gbps	14.88Mpps
GS950/18PS V2	16	2	18	16	36Gbps	26.78Mpps
GS950/28PS V2	24	4	28	24	56Gbps	41.66Mpps
GS950/52PS V2	48	4	52	24	104Gbps	77.38Mpps

### Power characteristics

PRODUCT	NON POE+ LOAD			FULL POE+ LOAD			POE POWER BUDGET(W)	POE SOURCING PORTS		
	MAX POWER CONSUMPTION (W)	MAX HEAT DISSIPATION (BTU/h)	MAX NOISE (dBA)	MAX POWER CONSUMPTION (W)	MAX HEAT DISSIPATION (BTU/h)	MAX NOISE (dBA)		POE (7.5W)	POE (15.4W)	POE+ (30W)
GS950/10PS V2	25	119.425	Fanless	100	350.692	Fanless	75	8	4	2
GS950/18PS V2	75	255.911	41	260	890.948	47.1	185	16	12	6
GS950/28PS V2	95	324.153	41	270	919.383	52	185	24	12	6
GS950/52PS V2	150	511.821	38	520	1800.853	50	370	24	24	12

Note: Noise values are dependent on the ambient temperature, not POE load. Above 25C the fan runs at full speed.

### Physical specifications

PRODUCT	HEIGHT	WIDTH	DEPTH	WEIGHT
GS950/10PS V2	44 mm (1.73 in)	330 mm (13.00 in)	180 mm (7.09 in)	1.9 kg (4.19 lb)
GS950/18PS V2	44 mm (1.73 in)	440 mm (17.32 in)	250 mm (9.80 in)	3.7 kg (8.16 lb)
GS950/28PS V2	44 mm (1.73 in)	440 mm (17.32 in)	250 mm (9.80 in)	3.7 kg (8.16 lb)
GS950/52PS V2	44 mm (1.73 in)	440 mm (17.32 in)	431 mm (17.00 in)	6.1 kg (13.45 lb)

### Performance

14,880pps for 10Mbps Ethernet  
 148,800pps for 100Mbps Ethernet  
 1,488,000pps for 1000Mbps Ethernet  
 MAC addresses: 16K  
 VLAN IDs available: 4K  
 Max VLANs: 256  
 Packet buffer: 1.5MB  
 DRAM: 256MB  
 Flash: 32MB

### Interface connections

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

### Technical specifications

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

### Environmental specifications

Operating temperature:  
 GS950/10PS V2 0°C to 40°C (32°F to 104°F)  
 GS950/18PS V2 0°C to 45°C (32°F to 113°F)  
 GS950/28PS V2 0°C to 45°C (32°F to 113°F)  
 GS950/52PS V2 0°C to 45°C (32°F to 113°F)  
 Storage 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

### Environmental compliance

RoHS  
 China RoHS  
 Eu-RoHS

### Electrical/mechanical approvals

UL62368  
 FCC/EN55022/CISPR 22 Class A  
 VCCI Class A  
 C-Tick  
 EN62368  
 EN55024  
 CE Mark  
 CSA / CUL

**Standards and compliance**

RFC 792	ICMP
RFC 854	Telnet
RFC 1213	MIB-II
RFC 1350	TFTP
RFC 1492	TACACS
RFC 1769	SNTP (Simple Network Time Protocol)
RFC 2131	DHCP client
RFC 2236	IGMP
RFC 2461	NDP (Neighbor Discovery protocol)
RFC 2616	HTTP
RFC 2866	RADIUS
RFC 4251	SSH
RFC 4330	SNTP
RFC 5343	SNMP
RFC 6101	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**

Model availability can vary between regions. Please check our website to see which models are available in your region.

**AT-GS950/10PS V2-xx<sup>1</sup>**  
8-port 10/100/1000T POE (8 POE Enabled)  
WebSmart switch with 2 SFP ports

**AT-GS950/18PS V2-xx<sup>1</sup>**  
16-port 10/100/1000T POE (16 POE Enabled)  
WebSmart switch with 2 SFP ports

**AT-GS950/28PS V2-xx<sup>1</sup>**  
24-port 10/100/1000T POE (24 POE Enabled)  
WebSmart switch with 4 SFP ports

**AT-GS950/52PS V2-xx<sup>2</sup>**  
48-port 10/100/1000T POE (24 POE Enabled)  
WebSmart switch with 4 SFP ports

**AT-BRKT-J22**  
Wall Mount Brackets for GS950PS V2 Series

<sup>1</sup> Rackmount kit is included. It can also be used for a wall-mount  
<sup>2</sup> Rackmount kit is included

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

**Package contents**  
Switch unit  
Rack-mount brackets and screws  
Power cord  
Rubber feet

**Small Form Pluggable Optics Modules**

**AT-SPSX**  
1000SX SFP, LC, MMF, 850 nm

**AT-SPLX10**  
1000LX SFP, LC, SMF, 1310 nm (10 km)

**AT-SPFX/2**  
2 km, 100FX (LC), 1310 nm

**AT-SPFX/15**  
15 km, 100FX (LC), 1310 nm

**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

**AT-SPBD20-13/I**  
20 km, 1G, SMF, BiDi, SC (1310Tx/1490Rx)

**AT-SPBD20-14/I**  
20 km, 1G, SMF, BiDi, SC (1490Tx/1310Rx)

**AT-SPBD40-13/I**  
40 km, 1G, SMF, BiDi, LC (1310Tx/1490Rx)

**AT-SPBD40-14/I**  
40 km, 1 G, SMF, BiDi, LC (1490Tx/1310Rx)