

## IE200 Series

### INDUSTRIAL MANAGED PoE+ SWITCHES

The Allied Telesis IE200 Series of industrial switches is a cost-effective solution that meets the high reliability requirements demanded by industrial applications. The units can be easily managed through Web GUI, SNMP, Telnet, or SSH while the fiber ports extend the connection distance, increasing the network elasticity and performance.

The IE200 Series provides Ethernet Protection Switched Ring (EPSRing™) resilient functionality that can prevent network connection failure. With the wide operating temperature range of between -40° and 75°C, IE200 Series switches can be deployed in any of the harshest industrial environments.

#### Performance

The IE200 Series of high performance and cost-effective industrial managed switches meets the high reliability requirements of industrial network operations. These industrial switches provide network managers with several key features, using the simple web-based management function, such as port-based VLANs, IEEE 802.1p QoS, port trunking/link aggregation, port mirroring, priority queues, and IEEE 802.1x security support. With support of up to 4K MAC addresses, the IE200 Series of switches is an ideal option for integrating management into any network solution.

#### Securing the Network Edge

To ensure data protection, it is important to control network access. Protocols such as IEEE 802.1x port-based authentication guarantee that only known users are connected to the

network. Unknown users who physically connect can be segregated into a pre-determined part of the network, offering guests such benefits as Internet access, while ensuring the integrity of private network data.

#### Gigabit and Fast Ethernet Support

The IE200 Series SFP ports support both Gigabit and Fast Ethernet Small Form-factor Performance Pluggables (SFPs). This makes the IE200 Series switches ideal for environments where Gigabit fiber switches will be phased in over time. This allows for connectivity to the legacy 100FX hardware until it is upgraded to Gigabit Ethernet.

Support for both speeds of SFPs allows organizations to stay within budget as they migrate to faster technologies.

#### High Network Resiliency

IE200 Series industrial switches support the EPSRing protocol that can help the network to recover from connection failure within 50ms or less, thus making the network system highly resilient. The EPSR is a carrier-class algorithm, and its recovery time is much faster than STP. In addition, Dual Homing and Double Ring Topology are also supported, further increasing network availability.



### Key Features

- » IEEE 802.3at PoE+ to supply 30W per port
- » AlliedWare Plus™ functionalities
- » USB port for image/configuration backup, restore, and upgrade
- » Redundant power inputs for higher system reliability
- » Advanced Ethernet Protection Switched Ring (EPSRing™) (RFC3619) to reduce network impact <50ms
- » STP, RSTP, MSTP, and EPSR for better redundancy
- » Superior security mechanism including SSL, SSH, 802.1X, MAC, IP filtering, RADIUS, TACACS+, and VLAN for access protection
- » IPv6 management for up-to-date requirements
- » Reliable and accurate QoS support
- » Internal DC/DC galvanic isolation
- » Static routes

#### Internal Electrical Isolation

The AT-IE200-6GP and 6FP (PoE+ models) provide isolation internally to meet IEEE 802.3at requirements. This results in a lower total cost of ownership, as the user can therefore employ a more cost-effective external power supply.\*

\* Power supply must be compliant with local/national safety and electrical code requirements.

# IE200 Series | Industrial Managed PoE+ Switches

BENEFIT	SOFTWARE FEATURE
<b>MANAGEABILITY</b>	BOOTP/DHCP and TFTP/FTP/SCP firmware upgrade; serial Command Line Interface (CLI); Web Graphical User Interface (GUI); SNMPv1/v2c/v3; hardware monitor for power supply presence and thermal; CPU protection by hardware watchdog
<b>CONFIGURATION</b>	Text-based running-config; TFTP loadable startup-config
<b>HIGH AVAILABILITY</b>	EPsRing for ring and chain topologies; Spanning-Tree protocol compatible; RSTP; MSTP; static Link Aggregation Group (LAG) and dynamic Link Aggregation Control Protocol (LACP) support
<b>DIAGNOSTIC</b>	LED indicators for power input, contact relays, and PoE+ abnormal operations; SNMP trap; alarm mail; Link Layer Discovery Protocol (LLDP); port mirror; and LLDP Media Endpoint Discovery (LLDP-MED) support
<b>VLAN</b>	802.1Q VLAN; VLAN assignment based on per port; MAC; double tagging (Q-in-Q) for provider backbone network; GARP VLAN Registration Protocol (GVRP); Link Aggregation
<b>QUALITY OF SERVICE (QoS)</b>	Strict priority scheduling; 802.1p remarking; DSCP-to-CoS mapping; Weighted Round Robin
<b>TRAFFIC FILTERING</b>	Static MAC filtering; Access Control List (ACL) filtering based on Ethernet or IP header, protected ports based on MAC
<b>SECURITY</b>	802.1x port-based authentication; auto IP-MAC; AAA (Authentication, Authorization, and Accounting) support; secure channel by SSL/SSH; SFTP (secure FTP)
<b>MULTICAST</b>	IGMPv2/v3 snooping; MLDv1/v2 snooping
<b>OTHERS</b>	DHCP client/server; TACACS+; Simple Network Time Protocol (SNTP); Domain Name Service (DNS); DHCP snooping/relay

## Specifications

MAC address	4K entries
Switching Bandwidth	12 Gbps
Packet Buffer	2 Mbit
Priority Queues	4
Simultaneous VLANs	4K
VLANs ID range	1 – 4094
Multicast groups	128

### Interface

I/O port	Gigabit Ethernet 10/100/1000T
Console port	RJ-45
F/W backup port	USB
Power connection	Terminal block

### Power Characteristics

Voltage	24–48V DC (AT-IE200-6GP) 12–48V DC (AT-IE200-6GT)
Max. consumption	155W (AT-IE200-6GP) 24W (AT-IE200-6GT)
Min. consumption	123W (AT-IE200-6GP) 1.5W (AT-IE200-6GT)
Power connector	Terminal block

### Environmental Specifications

Operating temp.	-40°C to 75°C (-40°F to 167°F)
Storage temp.	-40°C to 85°C (-40°F to 185°F)
Operating humidity	5% to 95% non-condensing
Storage humidity	5% to 95% non-condensing

### Environmental Compliance

RoHS  
China RoHS  
WEEE

### Physical Characteristics

Enclosure	Aluminum shell
Protection class	IP30 – IP31 with additional cover tool
Installation	DIN rail or wall mount
Dimensions (W × H × D)	6xP: 15.9 cm × 9.5 cm × 13.4 cm 6.25 in × 3.74 in × 5.28 in 6xT: 15.9 cm × 5.5 cm × 13.4 cm 6.25 in × 2.17 in × 5.28 in

### Standards and Compliance

IEEE 802.1ab	LLDP
IEEE 802.1ad	LACP supported
	Static link aggregation - 2 groups
IEEE 802.1Q	Port-based VLAN
IEEE 802.1w	RST
IEEE 802.1X	MAC-based authentication
IEEE 802.3	Ethernet
IEEE 802.3ab	Gigabit Ethernet
IEEE 802.3ac	VLAN Tag
IEEE 802.3ad	LACP
IEEE 802.3at	PoE Class 4
IEEE 802.3u	Fast Ethernet
IEEE 802.3x	Flow control
IEF RFC 768, 783, 791, 792, 793, 826, 896, 951, 1034, 1035, 1157, 1321, 1534, 1541, 1901, 1908, 2030, 2068, 2131, 2132 2866, 2865, 3580, 4251, 4253, 4254	
IEF SNMP MIBs 1213, 1493, 1643, 2233, 2618, 2674, 2737, 2819	

### Electrical/Mechanical Approvals

Safety	UL/IEC/EN 60950-1
CE, FCC Class A	
CSA 22.2: 60950-1	
EN55022	
EN55022:2010	
EN55024:2010	
EN61000-6-4	
EN61000-6-2	
EN61000-4-2 (ESD)	
EN61000-4-3 (RS)	
EN61000-4-4 (EFT)	
EN61000-4-5 Class 3 for DC power, Class 2 for I/O	
EN61000-4-6 (CS)	
2004/108/EC EMC Directive	
2006/95/EC Low Voltage Directive	
IEC60068-2-6	
Vibration	

## Ordering Information

### AT-IE200-6FT-80

4 × 10/100TX ports and 2 × 100/1000X SFP Industrial switch

### AT-IE200-6FP-80

4 × 10/100TX ports (PoE+ support) and 2 × 100/1000X SFP Industrial switch

### AT-IE200-6GT-80

4 × 10/100/1000T ports and 2 × 100/1000X SFP Industrial switch

### AT-IE200-6GP-80

4 × 10/100/1000T ports (PoE+ support) and 2 × 100/1000X SFP Industrial switch

### Supported SFP Modules

#### AT-SPBD20-13/I

20 km, 1 Gigabit, Bi-Di

#### AT-SPSX

1000SX GbE MMF 850 nm fiber up to 550 m

#### AT-SPSX/I

1000SX GbE MMF 850 nm fiber up to 550 m industrial temperature

#### AT-SPEX

1000X GbE MMF 1310 nm fiber up to 2 km

#### AT-SPLX10

1000LX GbE SMF 1310 nm fiber up to 10 km

#### AT-SPLX10/I

1000LX GbE SMF 1310 nm fiber up to 10 km industrial temperature

#### AT-SPBD10-13

1000LX GbE Bi-Di (1310 nm Tx, 1490 nm Rx) fiber up to 10 km

#### AT-SPBD10-14

1000LX GbE Bi-Di (1490 nm Tx, 1310 nm Rx) fiber up to 10 km

#### AT-SPLX40

1000LX GbE SMF 1310 nm fiber up to 40 km

#### AT-SPZX80

1000ZX GbE SMF 1550 nm fiber up to 80 km



the solution : the network

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