

# IS130 Series

## Industrial Unmanaged Layer 2 Switches

Allied Telesis ruggedized IS130 industrial unmanaged switches provide enduring performance in harsh environments, such as those found in outdoor IoT and industrial applications.

### Overview

The Allied Telesis IS130 multipurpose unmanaged Layer 2 switches are ideal for Smart Cities applications, harsh industrial environments, and any situation where tough and reliable devices are required.

With a wide operating temperature range of between -40° and 75°C, the IS130 switches tolerate demanding environments, such as those found in industrial and outdoor deployments.

### Performance

These high-performing, cost-effective switches meet the stringent performance requirements of today's industrial networks. Featuring support for up to 2K MAC addresses, the IS130 Series is ideal for edge networking.

### Gigabit and Fast Ethernet

The IS130 Series SFP port supports both Gigabit and Fast Ethernet Small Form-Factor Pluggables (SFPs). This makes the IS130 Series ideal for environments where Gigabit fiber will be phased-in over time, and allows for uninterrupted connectivity to the legacy 100FX hardware while it is upgraded to Gigabit Ethernet.

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

### Power over Ethernet

The IS130-6GP is a Power over Ethernet Power Sourcing Equipment (PoE PSE) device, which is compliant with IEEE802.3af and IEEE802.3at standards.

Each port supplies either 15.40W PoE with 12.95W available to the powered device, or 30.00W PoE+ with 25.50W available to the powered device.

PoE sourcing is the ideal solution to support many devices, including<sup>1</sup>:

- ▶ Pan, Tilt and Zoom (PTZ) cameras with heating/cooling fans for outdoor applications
- ▶ Enhanced infrared lighting
- ▶ Lighting controllers
- ▶ LED lighting fixtures
- ▶ Remote Point of Sale (POS) kiosks

<sup>1</sup> Power supply must be compliant with local/national safety and electrical code requirements. Select the supply with the most appropriate output power derating curve.



## Key Features

- ▶ Full Gigabit, wirespeed ports
- ▶ 100/1000Mbps SFP support
- ▶ IEEE 802.3at PoE+ sourcing (30W)
- ▶ 90W PoE power budget
- ▶ Wide -40 to +75°C operating temperature range
- ▶ Dual power inputs with reverse polarity and over-current protection
- ▶ Alarm output
- ▶ DIN rail and wall mount
- ▶ IP-30 (metal case)

## Specifications

PRODUCT	10/100/1000T (RJ-45) COPPER PORTS	100/1000X SFP PORTS	POE ENABLED PORTS	SWITCHING FABRIC	FORWARDING RATE
IS130-6GP	5	1	4	12Gbps	8.93Mpps

ELECTRICAL/MECHANICAL APPROVALS	
<b>Compliance Mark</b>	CE, FCC, RCM, TUV, VCCI
<b>Safety</b>	AS/NZS 62368.1 CAN/CSA C22.2 No.62368-1 EN/IEC/UL62368-1
<b>EMC</b>	AS/NZS CISPR 32, class A CAN/CSA-CISPR 22 CISPR 22; CISPR 32 EN55024; EN55032, class A EN61000-6-2, IEC61000-6-4, class A FCC part 15B, class A ICES-003, issue 6, class A VCCI, class A
<b>Electrostatic Discharge (ESD)</b>	EN61000-4-2, level 3
<b>Radiated Susceptibility (RS)</b>	EN61000-4-3, level 3
<b>Electrical Fast Transient (EFT)</b>	EN61000-4-4, level 3
<b>Lighting/Surge immunity (Surge)</b>	EN61000-4-5, level 2
<b>Conducted immunity (CS)</b>	EN61000-4-6, level 3
<b>Magnetic field immunity</b>	EN61000-4-8, level 4
<b>Freefall</b>	IEC60068-2-31 Class T2.3 (1m drop)
<b>Shock</b>	IEC60068-2-27 operational: 15g 11ms, half sine MIL-STD-810G, 2008 operational: 15g 11ms, half sine
<b>Vibration</b>	IEC60068-2-6 operational: 1g@10-150Hz MIL-STD-810G, 2008 operational: Procedure 1, Category 4, per Figure 514.6C-1

## Performance

- ▶ Up to 2K MAC addresses
- ▶ Packet buffer memory: 128KB
- ▶ Supports 9,216 bytes jumbo frames

## Other Interfaces

- ▶ Type Alarm output (1A @ 24Vdc)
  - Port no. 1
  - Connector 2-pin Terminal Block<sup>2</sup>
- ▶ Type Power Input
  - Port no. 2
  - Connector 2-pin Terminal Block<sup>2</sup>

## Environmental Specifications

- ▶ Operating temperature range: -40°C to 75°C (-40°F to 167°F)
- ▶ Storage temperature range: -40°C to 85°C (-40°F to 185°F)
- ▶ Operating relative humidity range: 10% to 95%RH non-condensing
- ▶ Storage relative humidity range: 10% to 95%RH non-condensing
- ▶ Operating altitude 3,000m maximum (9,843 ft)

## Mechanical

- ▶ EN 50022, EN 60715 Standardized mounting on rails

## Environmental Compliance

- ▶ RoHS
- ▶ China RoHS
- ▶ WEEE

<sup>2</sup> A single 6-pin screw Terminal Block include both power input and alarm output

## Physical Specifications

PRODUCT	WIDTH X DEPTH X HEIGHT	WEIGHT	PACKAGED		ENCLOSURE	MOUNTING	PROTECTION RATE
			WIDTH X DEPTH X HEIGHT	WEIGHT			
IS130-6GP	30 x 95 x 140 mm (1.18 x 3.74 x 5.51 in)	500 g (1.10 lb)	216 x 165 x 68 mm (8.50 x 6.50 x 2.68 in)	700 g (1.54 lb)	Metal shell	DIN rail, wall mount	IP30

## Power Characteristics

PRODUCT	INPUT VOLTAGE	COOLING	NO POE LOAD			FULL POE LOAD***			POE POWER BUDGET	MAX POE SOURCING PORTS	
			MAX POWER CONSUMPTION	MAX HEAT DISSIPATION	NOISE	MAX POWER CONSUMPTION	MAX HEAT DISSIPATION	NOISE		POE (15W)	POE+ (30W)
IS130-6GP	48Vdc*	Fanless	14.0W @48Vdc	47.9 BTU/h	-	74.0W @48Vdc	47.9 BTU/h	-	60W @75°C	4	2
	54Vdc**	Fanless	19.6W @54Vdc	66.9 BTU/h	-	109.6W @54Vdc	66.9 BTU/h	-	90W @75°C	4	3

\* sourcing IEEE 802.3af Type 1 (PoE)

\*\* sourcing IEEE 802.3at Type 2 (PoE+)

\*\*\* The Max Power consumption at full PoE load includes PD's consumption and margin. The cooling requirements of the switch are smaller than the power draw, because most of the load is dissipated at the PoE powered device (PD) and along the cabling. Use these wattage and BTU ratings for facility capacity planning.

## Standards and Protocols

### Ethernet

IEEE 802.2	Logical Link Control (LLC)	IEEE 802.3at	Power over Ethernet plus (PoE+)
IEEE 802.3	Ethernet	IEEE 802.3u	100BASE-X
IEEE 802.3ab	1000BASE-T	IEEE 802.3x	Flow control (FDX)
IEEE 802.3af	Power over Ethernet (PoE)	IEEE 802.3z	1000BASE-X

# IS130 Series | Industrial Unmanaged Layer 2 Switches

## Ordering Information

### Switches

The DIN rail and wall mount kits are included.

#### AT-IS130-6GP-80

5x 10/100/1000T, 1x 100/1000X SFP combo, Industrial Unmanaged Layer 2 Switch, POE+

### Supported SFP Modules

Refer to the installation guide for the recommended Max. Operating Temperature according to the selected SFP module.

#### 100Mbps SFP Modules

##### AT-SPFX/2

100FX multi-mode 1310 nm fiber up to 2 km

##### AT-SPFX/15

100FX single-mode 1310 nm fiber up to 15 km

##### AT-SPFXBD-LC-13

100BX Bi-Di (1310 nm Tx, 1550 nm Rx) fiber up to 10 km

#### AT-SPFXBD-LC-15

100BX Bi-Di (1550 nm Tx, 1310nm Rx) fiber up to 10 km

#### 1000Mbps SFP Modules

##### AT-SPSX

1000SX GbE multi-mode 850 nm fiber up to 550 m

##### AT-SPSX/I

1000SX GbE multi-mode 850 nm fiber up to 550 m industrial temperature

##### AT-SPEX

1000X GbE multi-mode 1310 nm fiber up to 2 km

##### AT-SPLX10

1000LX GbE single-mode 1310 nm fiber up to 10 km

##### AT-SPLX10/I

1000LX GbE single-mode 1310 nm fiber up to 10 km industrial temperature

##### AT-SPLX40

1000LX GbE single-mode 1310 nm fiber up to 40 km

#### AT-SPBD10-13

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

#### AT-SPBD10-14

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

#### AT-SPBD20-13/I

1000BX GbE Bi-Di (1310 nm Tx, 1490 nm Rx) fiber up to 20 km, industrial temperature

#### AT-SPBD20-14/I

1000BX GbE Bi-Di (1490 nm Tx, 1310 nm Rx) fiber up to 20 km, industrial temperature

#### AT-SPBD40-13/I

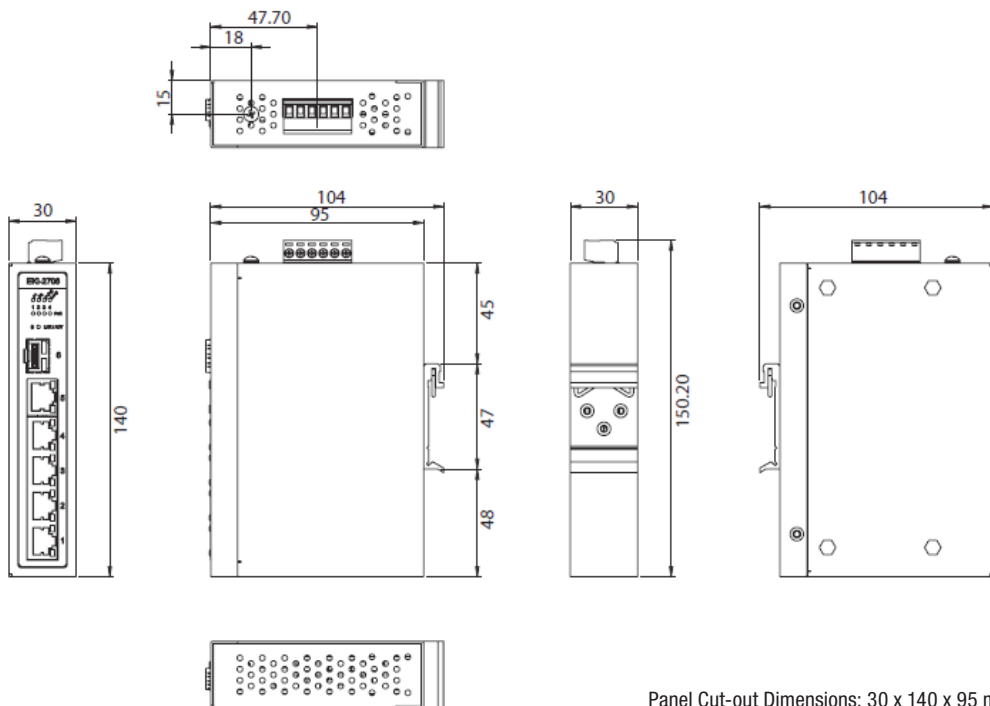
1000BX GbE Bi-Di (1310 nm Tx, 1490 nm Rx) fiber up to 40 km, industrial temperature

#### AT-SPBD40-14/I

1000BX GbE Bi-Di (1490 nm Tx, 1310 nm Rx) fiber up to 40 km, industrial temperature

## Dimensions

(mm)



Panel Cut-out Dimensions: 30 x 140 x 95 mm (1.18 x 5.51 x 3.74 in)