

IPES-0208T (IP67/IP43)

8 10/100TX PoE at/af + 2 GigaT Industrial Switch

- EN50155 verification / E-mark certified
- Provides M12 connector with IP67 / IP43 rated protection
- IEEE802.3at/af up to 30W PoE output
- 12V power input boost to 48V output
- Optional 72V/110V input steps down to 48V output for IEEE 802.3at/af max.80W
- Optional bypass protection for 1-pair GigaT ports (12V model)
- Wide Operating Temperature from -40°C to 75°C
- Wide range dual power inputs



IP67 model



IP43 model



OVERVIEW

Lantech IPES-0208T (IP67/IP43) is an 8 10/100 Base-TX + 2 GigaT w/8 PoE at/af injectors M12-connector unmanaged industrial switch for IP67 or IP43 rated protection, which meets the high reliability requirements demanded by industrial rolling stock applications.

Wide selection of input range models (12V /72V /110V) w/maximum PoE budget

The IPES-0208T (IP67/IP43) supports IEEE802.3at/af standard which can feed HI-power up to 30W at each PoE port for big power consumption devices like PTZ IP camera, High power wireless AP etc. The IPES-0208T is able to take 12/24V input and boost to 48V output for PoE feeding in vehicle use with IEEE802.3at/af standard up to 30W per PoE port with maximum 80W output. 72V/110V input model can feed 48V PoE at max 80W.

The IPES-0208T (IP67/IP43) is designed to meet with critical network environment with IP67/43 enclosure and M12 connectors for protection against dust and water. IP67 model can be immersed 1 meter under water for 30 minutes long, so it

is the best to place in the highly damp and moisture area in the train, vehicle or rail-side. Both have passed harsh environmental testing to comply with Industrial EMI and Safety standards as well as stability testing such as Free fall, Shock, and Vibration. For a greater flexibility in application the IPES-0208T (IP67/IP43) supports an extended operating temperature range from -40°C to 75°C.

EN50155 for rolling stock, EN45545 fire and smoke verification

With EN45545-2 Fire & Smoke, EN50155 verification and E-mark certification, the IPES-0208T (IP67/IP43) is best for railway and vehicle applications.

Optional GigaT bypass for 12V model

The optional bypass relay is set to bypass the switch to the next one when power is off in order to protect the network from crashing. Lantech bypass caters to remain in bypass mode until the switch is completely booting up when power is back to avoid another network lost.

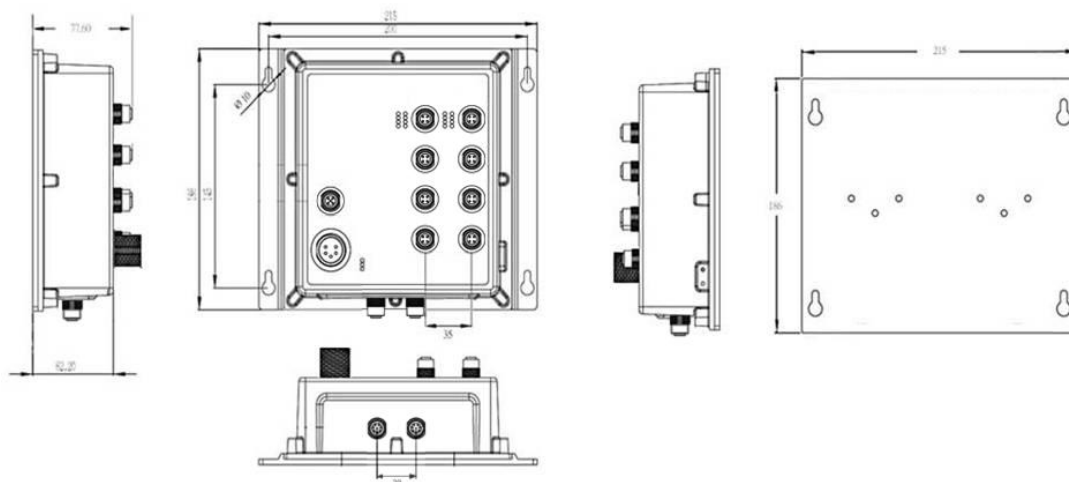
FEATURES & BENEFITS

- 8 10/100TX + 2 GigaT Unmanaged Industrial Switch with 8 PoE at/af M12 connectors in IP67/43 rated protection
- Supports IEEE802.3at/af feeding power up to 30W per PoE port at 12/24/48VDC
- Accept input voltage 12V and boost to 48V for PoE 802.3at/af maximum 80W output
- Dual Power Design with wide DC12/24/48V

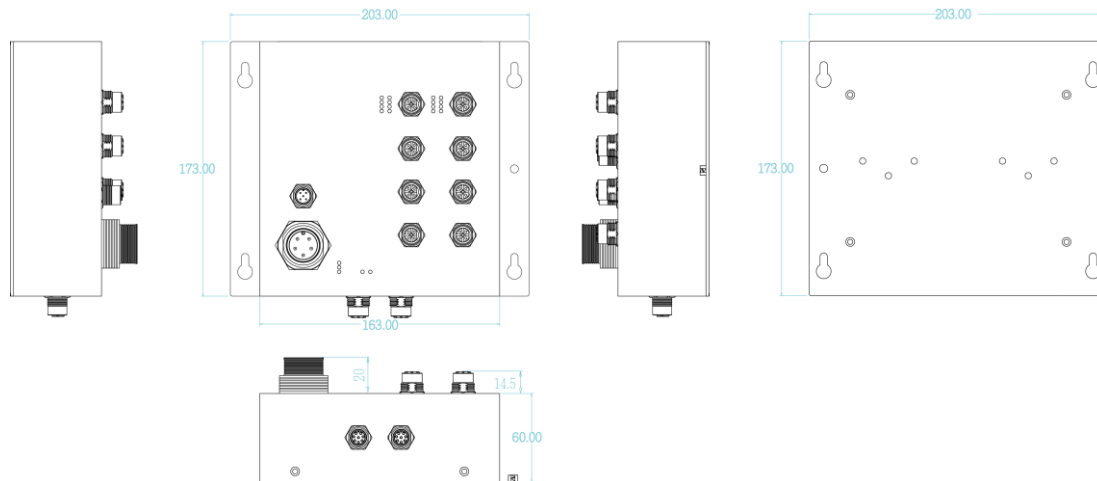
- Back-plane (Switching Fabric): 5.6 Gbps
- 8K MAC address table
- Wide Operating Temperature (-40°C ~75°C)
- Din rail** and wall mount design
- EN45545-2 Fire & Smoke, EN50155 and EN61373 shock/vibration verification
- E-mark certified
- Optional 72V model can accept dual 72V power input and feed 48V for PoE at/af at max 80W
- Optional 110V model can accept dual 110V power input and feed 48V for PoE at/af at max 80W
- Bypass protection** - Bypass failed switch caused by power failure of switch to protect network intactness (12V model)

DIMENSIONS (unit=mm)

IP67 model

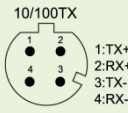


IP43 model



SPECIFICATIONS

Hardware Specification	
IEEE Standard	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-T Ethernet IEEE802.3ab 1000Base-T Ethernet IEEE802.3x Flow Control and Back Pressure IEEE802.3at/af Power over Ethernet
Transfer Rate	14,880pps for Ethernet port
	148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Ethernet port
Bypass Protection**	High-speed copper switching Support 1 pair Giga-T bypass (12V model)
Mac Address	8K MAC address table
Connector	10/100T: 8 x M12, 4-pole D-coded, Female with auto MDI/MDI-X function Power connector: 1 x M23, 5-pole A-coded,

	Male Relay contact : 1 x M12 5-pole A-coded	Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Protocol	CSMA/CD	Case Dimension	Aluminum case, IP-67, 215mm(W)x185mm(H)x71mm(D) Aluminum case, IP-43 202mm(W)x172mm(H)x62.5mm(D)
LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green)	Weight	1.4kgs (IP67); 1.2kgs(IP43)
PoE pin assignment	M12 port # 1~ # 8 support IEEE 802.3at/af End-point. Per port provides up to 30W 	Installation	Din Rail**, Wall Mount Design
Power Supply	9.5~56VDC on standard model 50.4~90VDC on 72V model 43~137.5VDC on 110V model with input isolation	EMC	FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN-61000-4-4 (EFT), CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE EN61000-4-8 (Magnetic Field), CE EN55022 Class A, CE EN55024
Power Consumption	10W for 12/24/48VDC 13.5W for 72/110VDC	Stability Testing	EN61373 (Shock and Vibration)
Power Budget	240W for 45~56V input (54V input is recommended for PTZ or heater applications) 80W for 12V input 120W for 24V input 80W for 72V Input 80W for 110V Input	Verifications & Report	EN50155/EN50121-3-2/EN50121-4 verification EN45545-2 R24/R25 (EN ISO 4589-2, EN ISO 5659-2, NF X70-100-1 & 2) Fire & Smoke verification E-mark E4 certificate
Operating Humidity	5% to 95% (Non-condensing)	Warranty	5 years
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F) (72/110V model: -40°C~60°C / -40°F~140°F)		

*Pending
**Optional

ORDERING INFORMATION

All model packages include M12 caps and wall mount bracket. All standard models are non-coating, optional coating models are available with -C model name.

- **IPES-0208T-67-12V.....P/N: 8360-555**
8 10/100TX + 2 GigaT IP67 rated 8 PoE at/af Switch w/M12 connectors; -40~75C; dual 9.5~56VDC
- **IPES-0208T-67-12V-BT.....P/N: 8360-5552**
8 10/100TX + 2 GigaT IP67 rated 8 PoE at/af Switch w/M12 connectors; -40~75C; dual 9.5~56VDC, 1-pair Giga-T Bypass
- **IPES-0208T-43-12V.....P/N: 8360-5551**
8 10/100TX + 2 GigaT IP43 rated 8 PoE at/af Switch w/M12 connectors; -40~75C; dual 9.5~56VDC
- **IPES-0208T-43-12V-BT.....P/N: 8360-5553**
8 10/100TX + 2 GigaT IP43 rated 8 PoE at/af Switch w/M12 connectors; -40~75C; dual 9.5~56VDC, 1-pair Giga-T Bypass
- **IPES-0208T-67-72V.....P/N: 8360-557**
8 10/100TX + 2 GigaT IP67 rated 8 PoE at/af Switch w/M12 connectors; -40~60C; dual 50.4~90VDC
- **IPES-0208T-43-72V.....P/N: 8360-5571**
8 10/100TX + 2 GigaT IP43 rated 8 PoE at/af Switch w/M12 connectors; -40~60C; dual 50.4~90VDC
- **IPES-0208T-67-110V.....P/N: 8360-549**
8 10/100TX + 2 GigaT IP67 rated 8 PoE at/af Switch w/M12 connectors; -40~60C; dual 43~137.5VDC
- **IPES-0208T-43-110V.....P/N: 8360-5491**
8 10/100TX + 2 GigaT IP43 rated 8 PoE at/af Switch w/M12 connectors; -40~60C; dual 43~137.5VDC

OPTIONAL ACCESSORIES

M12 / M23 Connector & Cable

- **ECONM23-5P(F)70CM CABLE** M23 power cable 90 degree angle, 70cm, 5 pin, Made in Taiwan
- **ECONM23-5P(F)70CM CABLE-C** M23 power cable 90 degree angle, 70cm, 5 pin, Made in China
- **ECAB124030MJS** 4 Pin M12 RJ45 Male 3 Meters; STP Cable

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