

IPES-0208GF (IP67/IP43)

8 10/100TX PoE at/af + 2 1000FX Industrial Switch

- EN50155/ E-mark certified
- Provides M12 connector with IP67 or 43 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
- Wide Operating Temperature from -40°C to 75°C
- Wide range dual power inputs



IP 67 Rated



IP43 Rated

OVERVIEW

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

The IPES-0208GF (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-0208GF 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-0208GF (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-0208GF (IP67/IP43) supports an extended operating temperature range from -40°C to 75°C.

The wide range dual power input from 9.5V~56V fits with most of train/vehicle usage. The 72V model offers dual power supply that can be powered from 50.4V to 90VDC while 110V model provides dual 43V to 160V inputs.

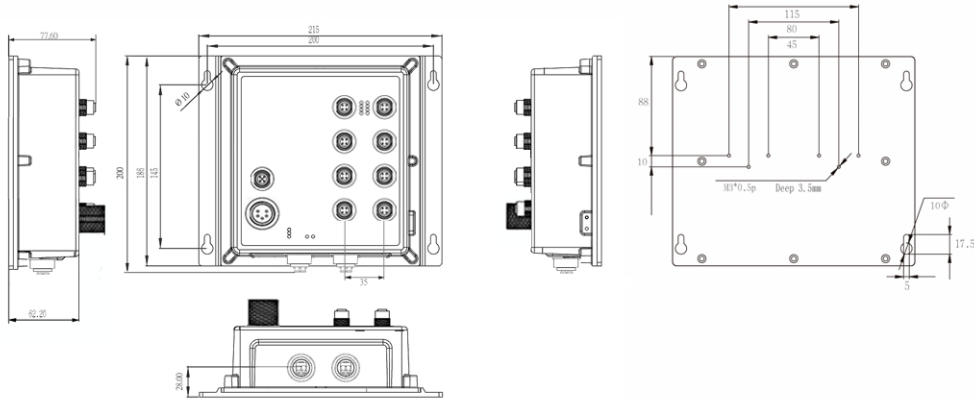
With EN45545-2 Fire & Smoke, E-mark, and EN50155 certification, the IPES-0208GF (IP67/IP43) is best for railway and vehicle applications.

FEATURES & BENEFITS

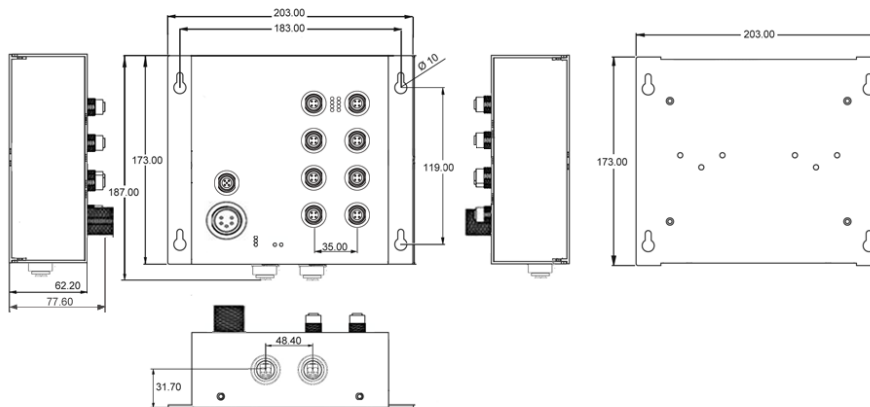
- 8 10/100TX+2GigaFX Unmanaged Industrial Switch with 8 PoE at/af M12 connectors and IP67/43 rated protection
- Supports IEEE802.3at/af feeding power up to 30W per PoE port at 12/24/48VDC
- Accept input voltage 12V and boost to 48V for PoE 802.3at/af maximum 80W output
- Dual Power Design with wide DC12/24/48V
- Back-plane (Switching Fabric): 5.6Gbps
- 8K MAC address table
- Wide Operating Temperature (-40°C ~75°C)
- Din rail** and wall mount design
- EN45545-2 Fire & Smoke, E-mark, EN50155 and EN61373 shock/vibration 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

DIMENSIONS (unit=mm)

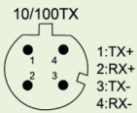
IP67 model



IP43 model



SPECIFICATIONS

Hardware Specification		Protocol	CSMA/CD
IEEE Standard	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-T Ethernet IEEE802.3z 1000Base-X Ethernet IEEE802.3x Flow Control and Back Pressure IEEE802.3at/af Power over Ethernet	LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green) GigaFX: Link/Activity (Green)
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Fiber Ethernet port	PoE pin assignment	M12 port # 1~#8 support IEEE 802.3at/af End-point, Alternative A mode. Per port provides 30W PoE at/ 15W PoE af. 
Mac Address	8K MAC address table	Power Supply	9.5~56VDC on standard model 50.4~90VDC on 72V model 43~160VDC on 110V model with input isolation
Connector	10/100T: 8 x M12, 4-pole D-coded, Female with auto MDI/MDI-X function Giga-FX : 2 x LC connector for single mode or multi mode type fiber cable Power connector: 1 x M12, 5-pole A-coded, Male	Power Consumption	10W for 12/24/48VDC 13.5W for 72/110VDC
Giga Optical Cable	Multi-mode: 50/125um~62.5/125um Single mode: 9/125um Available distance: 0.5km (Multi-mode)/10km (Single-mode) Wavelength: 850nm (Multi-mode)/850nm (Single-mode)	Power Budget	240W for 45~56V input (55V input is recommended for 802.3at 30W applications) 80W for 12V input 120W for 24V input

	80W for 72V Input 80W for 110V Input		CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE EN61000-4-8 (Magnetic Field), CE EN61000-6-2, CE EN61000-6-4
Operating Humidity	5% to 95% (Non-condensing)		
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F) (72/110V model: -40°C~60°C / -40°F~140°F)		
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	Stability Testing	IEC61373 (Shock), EN61373 (Shock and Vibration)
Case Dimension	Aluminum case, IP-67, 215mm(W)x185mm(H)x71mm(D) Aluminum case, IP-43 202mm(W)x172mm(H)x62.5mm(D)	Certificates & report	EN50155/EN50121-3-2/EN50121-4 Certificate EN45545-2 R24/R25 (EN ISO 4589-2, EN ISO 5659-2, NF X70-100-1 & 2) Fire & Smoke Certificate E-Mark E4 Certificate
Weight	1.4kgs (IP67); 1.2kgs(IP43)	Warranty	5 years
Installation	Din Rail**, Wall Mount Design		*Pending **Optional
EMC	FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN-61000-4-4 (EFT),		

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-0208GF-SX-67-12V.....P/N: 8361-548**
8 10/100TX PoE at/af + 2 GigaSX 500M IP67 rated Industrial Switch w/M12 connectors; dual 9.5~56V input; -40~75C
- **IPES-0208GF-SX-43-12V.....P/N: 8361-5481**
8 10/100TX PoE at/af + 2 GigaSX 500M IP43 rated Industrial Switch w/M12 connectors; dual 9.5~56V input; -40~75C
- **IPES-0208GF-LX-67-12V.....P/N: 8361-549**
8 10/100TX PoE at/af + 2 GigaLX 10KM IP67 rated Industrial Switch w/M12 connectors; dual 9.5~56V input; -40~75C
- **IPES-0208GF-LX-43-12V.....P/N: 8361-5491**
8 10/100TX PoE at/af + 2 GigaLX 10KM IP43 rated Industrial Switch w/M12 connectors; dual 9.5~56V input; -40~75C
- **IPES-0208GF-SX-67-72V.....P/N: 8361-550**
8 10/100TX PoE at/af + 2 GigaSX 500M IP67 rated Industrial Switch w/M12 connectors; dual 50.4~90V input; -40~60C
- **IPES-0208GF-SX-43-72V.....P/N: 8361-5501**
8 10/100TX PoE at/af + 2 GigaSX 500M IP43 rated Industrial Switch w/M12 connectors; dual 50.4~90V input; -40~60C
- **IPES-0208GF-LX-67-72V.....P/N: 8361-551**
8 10/100TX PoE at/af + 2 GigaLX 10KM IP67 rated Industrial Switch w/M12 connectors; dual 50.4~90V input; -40~60C
- **IPES-0208GF-LX-43-72V.....P/N: 8361-5511**
8 10/100TX PoE at/af + 2 GigaLX 10KM IP43 rated Industrial Switch w/M12 connectors; dual 50.4~90V input; -40~60C
- **IPES-0208GF-SX-67-110V.....P/N: 8361-552**
8 10/100TX PoE at/af + 2 GigaSX 500M IP67 rated Industrial Switch w/M12 connectors; dual 43~160V input; -40~60C
- **IPES-0208GF-SX-43-110V.....P/N: 8361-5521**
8 10/100TX PoE at/af + 2 GigaSX 500M IP43 rated Industrial Switch w/M12 connectors; dual 43~160V input; -40~60C
- **IPES-0208GF-LX-67-110V.....P/N: 8361-553**
8 10/100TX PoE at/af + 2 GigaLX 10KM IP67 rated Industrial Switch w/M12 connectors; dual 43~160V input; -40~60C
- **IPES-0208GF-LX-43-110V.....P/N: 8361-5531**
8 10/100TX PoE at/af + 2 GigaLX 10KM IP43 rated Industrial Switch w/M12 connectors; dual 43~160V input; -40~60C

OPTIONAL ACCESSORIES

M12/M23 Connector & Cable

- **ECON230005PF** 5 Pin M23 Power Female Connector
- **ECONM23-5P(F)70CM CABLE** 5 Pin M23 Power Female 90C angle Connector+ 70 CM Cable
- **ECAB124030MJS** 4 Pin M12 RJ45 Male 3 Meters; STP Cable

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