

# IPES-0208T (IP67/IP43)

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

- EN50155/ 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
- 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-connctor unmanaged industrial switch for IP67 or IP43 rated protection, which meets the high reliability requirements demanded by industrial rolling stock applications.

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.

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

#### **FEATURES & BENEFITS**

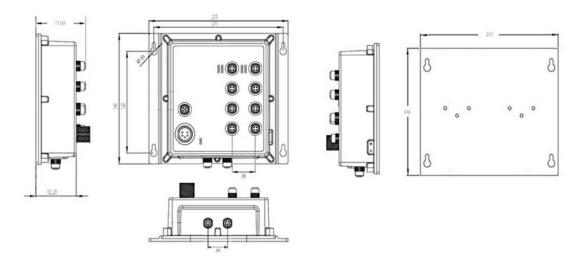
- 8 10/100TX + 2 GigaT Unmanaged Industrial Switch with 8 PoE at/af M12 connectors in IP67/43 rated protection
- Supports IEEE802.3at/af feeding power up to 30W per PoE port at 12/24/48VDC
- Accept input voltage 12V and boost to 48V for PoE 802.3at/af maximum 80W output
- Dual Power Design with wide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

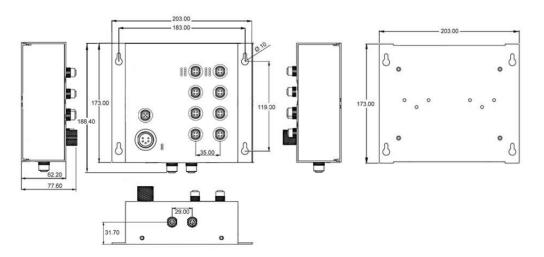


## **DIMENSIONS** (unit=mm)

#### IP67 model



#### IP43 model



## **SPECIFICATIONS**

Hardware Specification		PoE pin assignment	M12 port # 1~#8 support IEEE 802.3at/af End-point,
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		Alternative A mode. Per port provides 30W PoE at/ 15W PoE af.  10/100TX  1:TX+ 2:RX+ 3:TX-
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port		4:RX-
	1,488,000pps for Gigabit Ethernet port	Power Supply	9.5~56VDC on standard model 50.4~90VDC on 72V model
Mac Address	8K MAC address table		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 Power connector: 1 x M23, 5-pole A-coded, Male Relay contact: 1 x M12 5-pole A-coded	Power Consumption Power Budget	10W for 12/24/48VDC 13.5W for 72/110VDC 240W for 45–56V input (55V input is recommended for 802.3at 30W
Protocol	CSMA/CD		applications)
LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green)		80W for 12V input 120W for 24V input 80W for 72V Input

Datasheet Version 1.5



Storage   -40°C - 85°C (-40°F - 185°F)   Stability Testing   IEC61373 (Shock), EN61373 (Shock and Vibration)   Case Dimension   Aluminum case, IP-67.   CE EN61000-4-6 (CS), CE EN61000-4-8 (Magnetic Field), CE EN61000-6-2, CE EN61000-6-2, CE EN61000-6-4   Stability Testing   IEC61373 (Shock), EN61373 (Shock and Vibration)   Case Dimension   Aluminum case, IP-67.   Certificates & EN50155/EN50121-3-2/EN50121-4 Certificate
Operating         -40°C ~ 75°C (-40°F ~ 167°F)         CE EN61000-6-2,           Temperature         (72/110V model: -40°C ~ 60°C / -40°F ~ 140°F)         CE EN61000-6-4           Storage         -40°C ~ 85°C (-40°F ~ 185°F)         Stability Testing         IEC61373 (Shock), EN61373 (Shock and Vibration)           Temperature         Vibration         FNF0454 A 20°FNF0434 A 20°F
Temperature
Storage -40°C - 85°C (-40°F - 185°F) Stability Testing IEC61373 (Shock), EN61373 (Shock and Vibration)  Temperature   IEC61373 (Shock), EN61373 (Shock and Vibration)   IEC61374 (Shock and Vibration)   IEC61375 (Shock and Vibration)
Temperature Vibration)
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Case Dimension Aluminum case, IP-67. Certificates & EN50155/EN50121-3-2/EN50121-4 Certificate
215mm(W)x185mm(H)x71mm(D) Report EN45545-2 R24/R25 (EN ISO 4589-2, EN ISO 5659-2, NF X70-100-1 & 2) Fire & Smoke
Aluminum case, IP-43  Certificate
202mm(W)x172mm(H)x62.5mm(D) E-Mark E4 Certificate
Weight         1.4kgs (IP67); 1.2kgs(IP43)         Warranty         5 years
Installation Din Rail**, Wall Mount Design *Pending
EMC FCC Class A, **Optional
CE EN61000-4-2 (ESD),
CE EN61000-4-3 (RS),
CE EN-61000-4-4 (EFT),
CE EN61000-4-5 (Surge),

### **ORDERING INFOMATION**

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-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-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 43~160VDC

■ 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 43~160VDC

#### **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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