

# IPES-0008A (IP67/IP43)

## 8 10/100TX PoE at/af Industrial Switch

- EN50155/50121-3-2/50121-4 verification
- 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 input steps down to 48V output for IEEE 802.3at/af max.80W
- Wide Operating Temperature from -40°C to 75°C
- Wide range redundant power inputs



IP67 model



IP43 model

## OVERVIEW

Lantech IPES-0008A (IP67/IP43) is an 8 10/100 Base-TX 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-0008A (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-0008A-12V 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-0008A (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-0008A (IP67/IP43) supports an extended operating temperature range from -40°C to 75°C.

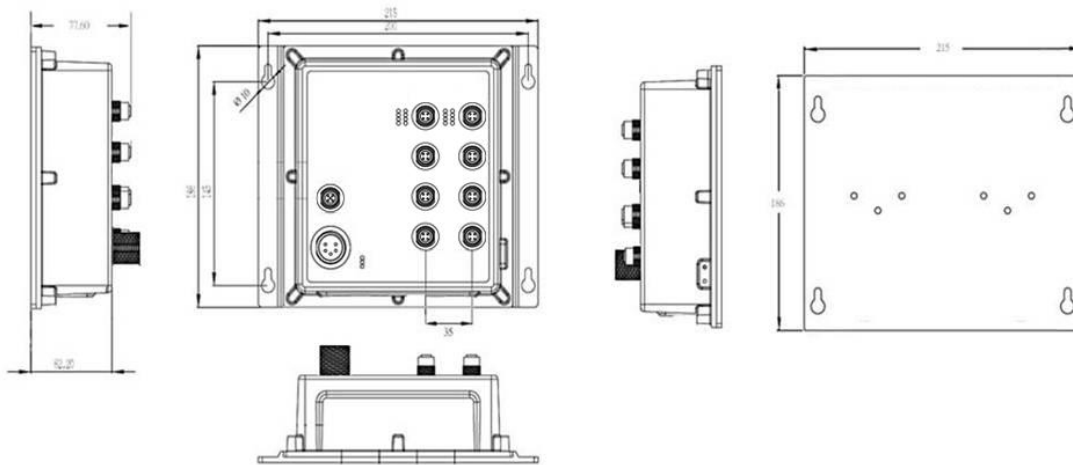
The IPES-0008A (IP67/IP43) is compliant with EN50155/50121-3-2/ 50121-4 (railway applications), Fire&Smoke and E-Mark, making the switch suitable for various industrial rolling stock applications.

## FEATURES & BENEFITS

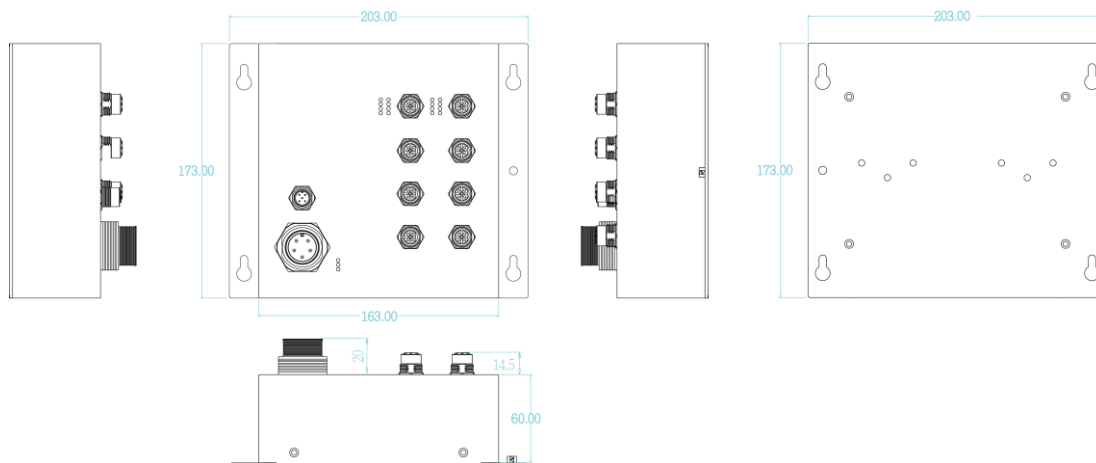
- 8 10/100TX Unmanaged Industrial Switch with M12 connectors and IP67/43 rated protection
- Supports IEEE802.3at/af feeding power up to 30W per PoE port at 12/24/48VDC
- Accept input voltage 12V and boost to 48V for PoE 802.3at/af maximum 80W output
- Redundant Power Design with wide DC12/24/48V
- Back-plane (Switching Fabric): 1.6 Gbps
- 8K MAC address table
- Wide Operating Temperature (-40°C ~75°C)
- Din rail\*\* and wall mount design
- EN50155/50121-3-2/50121-4 and Fire&Smoke 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

**DIMENSIONS (unit=mm)**

**IP67 model**



**IP43 model**



**SPECIFICATIONS**

Hardware Specification		PoE pin assignment
IEEE Standard	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-T Ethernet IEEE802.3x Flow Control and Back Pressure IEEE802.3at/af Power over Ethernet	M12 port # 1~ # 8 support IEEE 802.3at/af End-point. Per port provides up to 30W
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port	
Mac Address	8K MAC address table	Power Supply
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	9.5~60VDC for 12V model -48VDC is available for single power input 50.4V~90VDC for 72V model 43V~137.5VDC for 110V model with input isolation
Protocol	CSMA/CD	Power
LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green)	Consumption
		Power Budget

	120W for 802.3af 48V input 80W for 12V input 80W for 24V input 80W for 72V Input 80W for 110V Input		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
Operating Humidity	5% to 95% (Non-condensing)	Stability Testing	EN61373 (Shock and Vibration)
Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)	Verifications & reports	EN50155 verification EN50121-3-2 verification EN50121-4 verification Fire & Smoke verification E-Mark certified
Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)	Warranty	5 years
Case Dimension	Aluminum case, IP-67, 215mm(W)x185mm(H)x71mm(D) Aluminum case, IP-43 202mm(W)x172mm(H)x62.5mm(D)		*Pending **Optional
Weight	IP67:1.4kgs ; IP43:1.2kgs		
Installation	Din Rail**, Wall Mount Design		
EMC	FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS),		

## ORDERING INFORMATION

- **IPES-0008A-12V-67.....P/N: 8360-553**  
8 10/100TX IP67 rated Industrial PoE at/af Switch w/M12 connectors; -40~75C; 12/24/48VDC dual input
- **IPES-0008A-12V-43.....P/N: 8360-5531**  
8 10/100TX IP43 rated Industrial PoE at/af Switch w/M12 connectors; -40~75C; 12/24/48VDC dual input
- **IPES-0008A-72V-67.....P/N: 8360-554**  
8 10/100TX IP67 rated Industrial PoE at/af Switch w/M12 connectors; -40~60C; 50.4~90VDC dual input
- **IPES-0008A-72V-43.....P/N: 8360-5541**  
8 10/100TX IP43 rated Industrial PoE at/af Switch w/M12 connectors; -40~60C; 50.45~90VDC dual input
- **IPES-0008A-110V-67.....P/N: 8360-560**  
8 10/100TX IP67 rated Industrial PoE at/af Switch w/M12 connectors; -40~60C; 43~137.5VDC dual input
- **IPES-0008A-110V-43.....P/N: 8360-5601**  
8 10/100TX IP43 rated Industrial PoE at/af Switch w/M12 connectors; -40~60C; 43~137.5VDC dual input

## OPTIONAL ACCESSORIES

### M12 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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