

# IPES-0005B (IP41)

## 5 10/100TX PoE at/af Industrial Switch

- EN50155/50121-3-2/50121-4 and EN45545-2  
R24/R25 Fire & Smoke certificate
- E-mark certificate for vehicle
- Provides M12 connector with IP41 rated protection
- IEEE802.3at/af up to 30W PoE output
- 12V power input boost to 48V output (12V model)
- 72V input steps down to 48V output for IEEE  
802.3at/af max.80W (72V model)
- Wide Operating Temperature from -40°C to 75°C
- Wide range redundant power inputs



## OVERVIEW

Lantech IPES-0005B (IP41) is an 5 10/100 Base-TX with M12-connector unmanaged industrial switch for IP41 rated protection, which meets the high reliability requirements demanded by industrial rolling stock applications.

The IPES-0005B (IP41) 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-0005B-12V is able to take 12V input and boost to 48V/54V output for PoE feeding in vehicle use with IEEE802.3at/af standard up to 30W per PoE port with maximum 80W output. 72V model accept 72V input and can feed 48V PoE at max 80W.

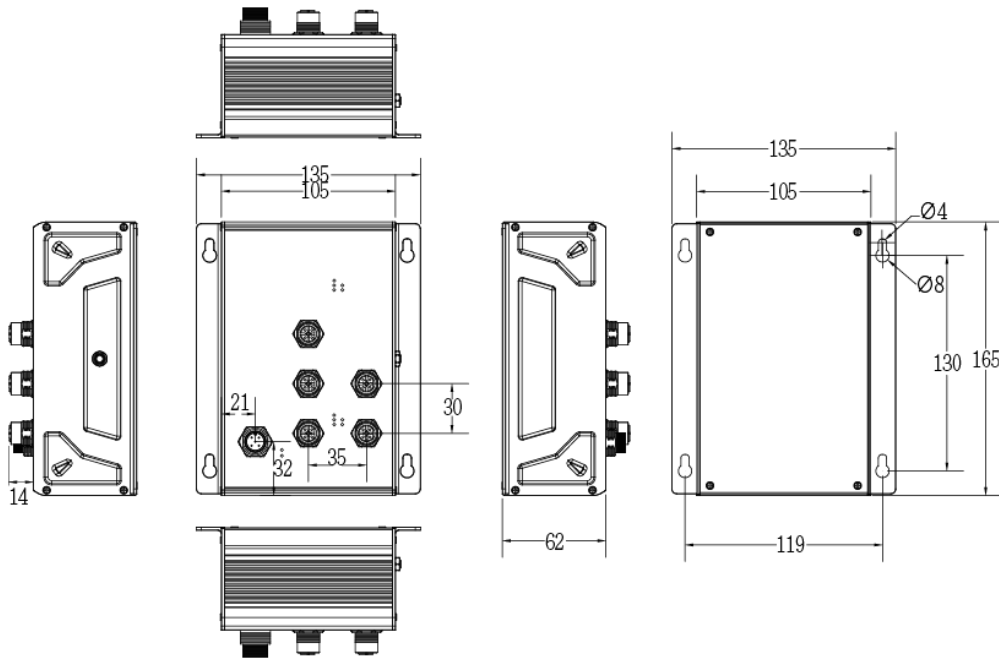
The IPES-0005B (IP41) is designed to meet with critical network environment with IP41 enclosure and M12 connectors for protection against dust and water. It has passed harsh environmental testing to comply with Industrial EMI and Safety standards as well as stability testing such as Free fall, Shock, and Vibration. For a greater flexibility in application the IPES-0005B (IP41) supports an extended operating temperature range from -40°C to 75°C.

The IPES-0005B (IP41) is compliant with EN50155/ 50121-3-2/ 50121-4 certificate (railway applications), EN45545-2 R24/R25 Fire & Smoke certificate, E-mark certificate for vehicle , making the switch suitable for various industrial rolling stock applications.

## FEATURES & BENEFITS

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>■ 5 10/100TX Unmanaged Industrial Switch with M12 connectors and IP41 rated protection</li> <li>■ Supports IEEE802.3at/af feeding power up to 30W per PoE port at 12/24/48VDC (12V or 48V model)</li> <li>■ Accept input voltage 12V and boost to 48V/54V for PoE 802.3at/af maximum 80W output (12V model)</li> <li>■ 72V input model allow maxi. 80W PoE budget</li> <li>■ Dual Power Design with wide DC12/24 input (12V</li> </ul> | <ul style="list-style-type: none"> <li>model); 72V input(72V model)</li> <li>■ Back-plane (Switching Fabric): 1.0 Gbps</li> <li>■ 8K MAC address table</li> <li>■ Wide Operating Temperature (-40°C ~75°C)</li> <li>■ Din rail** and wall mount design</li> <li>■ E-mark certificate</li> <li>■ EN50155/50121-3-2/50121-4 and EN45545-2 R24/R25 Fire &amp; Smoke certificate</li> </ul> |
|---|---|

**DIMENSIONS (unit=mm)**



**SPECIFICATIONS**

Hardware Specification		Operating Humidity	5% to 95% (Non-condensing)
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	Operating Temperature	-40°C ~ 75°C (-40°F ~ 167°F)
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port	Storage Temperature	-40°C ~ 85°C (-40°F ~ 185°F)
Mac Address	8K MAC address table	Case Dimension	Aluminum case, IP-41 135mm(W)x165mm(H)x62mm(D)
Connector	10/100T: 5 x M12, 4-pole D-coded, Female with auto MDI/MDI-X function Power connector: 1 x M12, 5-pole A-coded, Male	Weight	700g
Protocol	CSMA/CD	Installation	Din Rail**, Wall Mount Design
LED	Per unit: Power 1 (Green), Power 2 (Green), Ethernet: Link/Activity (Green)	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 EN61000-6-2, CE EN61000-6-4
PoE pin assignment	M12 port # 1~#5 support IEEE 802.3at/af End-point, Alternative A mode. Per port provides 30W PoE at/ 15W PoE af.  	Stability Testing	IEC61373 (Shock), EN61373 (Shock and Vibration)
Power Supply	Dual input 9.5~56VDC for PoE feeding (12V model) 50.4~90VDC for PoE feeding (72V model)	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 certificate for vehicle
Power Consumption	10W for 12/24/48VDC 13.5W for 72V	Warranty	5 years
Power Budget	80W for 12V input 120W for 24V input 80W for 72V Input		**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-0005B-41-12V.....P/N: 8360-5681**  
8 10/100TX IP41 rated Industrial PoE at/af Switch w/M12 connectors; -40~75C; 12/24/48VDC dual input
- **IPES-0005B-41-72V.....P/N: 8360-5691**  
8 10/100TX IP41 rated Industrial PoE at/af Switch w/M12 connectors; -40~75C; 72VDC dual input

## OPTIONAL ACCESSORIES

### M23 / M12 Connector & Cable

- **ECON120005PF** 5 Pin M12 Power Female Connector
- **ECONM12-5P(F)70CM CABLE** 5 Pin M12 Power Female 90C angle Connector+ 70 CM Cable
- **ECAB124030MJS** 4 Pin M12 RJ45 Male 3 Meters; STP Cable

#### Lantech Communications Global Inc.

[www.lantechcom.tw](http://www.lantechcom.tw)  
[info@lantechcom.tw](mailto:info@lantechcom.tw)

© 2014 Copyright Lantech Communications Global Inc. all rights reserved.  
The revise authority rights of product specifications belong to Lantech Communications Global Inc.  
Lantech may make changes to specification and product descriptions at anytime, without notice.