I(P)GS-0008B

8 10/100/1000T PoE at/af Industrial Ethernet Unmanaged Switch ; 12V/24V/48V input models

- *Support IEEE802.3at/af up to 30W per port*
- *PoE model: Dual 9V~56VDC input (12V model); 9~36VDC (24V model); 44V~56VDC input (48V model)*
- *Non-PoE model: dual 9V~60VDC input (12V model); 9~36VDC (24V model)*
- *Galvanic isolation protection (power input /Ethernet port to case ground)*
- *Max PoE budget 240W at 48V, 80W at 12V input, 120W at 24V input*
- *Relay alarm output for power fail and alarm*
- *Only 12V or 24VDC input system is applicable for E-mark approval*
- *E-marking** certificate for vehicle application*

Non-PoE model PoE model

OVERVIEW

Lantech I(P)GS-0008B is a high performance all 8 10/100/1000T industrial Ethernet switch with w/8/6 PoE 802.3af/at ports.

Galvanic isolation for dual 48V, 12V, 24V input with max PoE budget

The IPGS-0008B 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 IPGS-0008B-12V accepts power input 9~56VDC with IEEE802.3at/af standard up to 30W per PoE port with maximum 120W@24V and 80W@12V output (at dual input). The 24V model is also compliant with ISO 7637-2 which protects switch from being damaged by high voltage that could be found at vehicle cranky start.

PoE 48V model accepts 45~56VDC power input and can feed 48V output for PoE feeding in vehicle at max 240W @48V input.

E-marking certificate, High reliability and extended working temperature

Lantech IPGS-0008B provides ±2000V EFT and ±6000V ESD protection, which can reduce unstable situation caused by power line and Ethernet. It has high reliability and robustness coping with extensive EMI/RFI phenomenon, environmental vibration and shocks usually found in Automation, transportation, surveillance, Wireless backhaul, Semi-conductor factory and assembly lines.

The -E model can be used in extreme environments with an operating temperature range of -40°C to 75°C.

The E-marking certificate makes it the most suitable PoE switch for bus, carriage, other vehicles application as well as for industrial areas where the power source is limited with 12V but has demand of IP surveillance or VoIP applications. Only 12V or 24VDC input system is applicable for E-mark approval.

FEATURES & BENEFITS

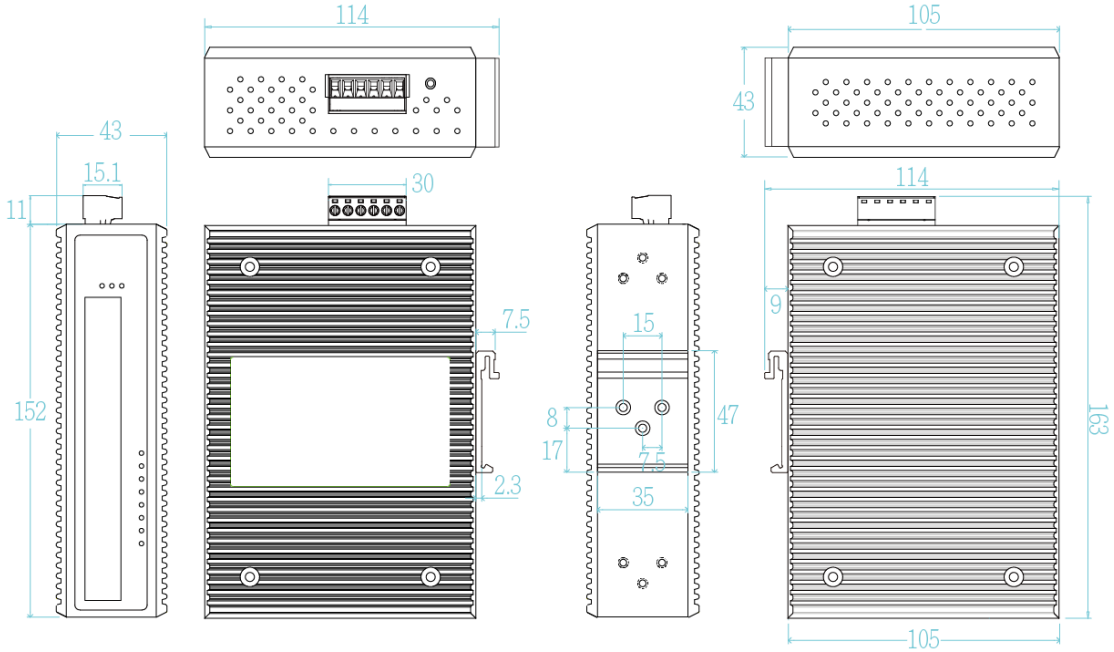
- **8 10/100/1000T industrial Ethernet switch w/8/6 PoE 802.3af/at ports (Total 8 Ports Switch)**
- **Embedded 8/6 PoE ports IEEE802.3af/at function to feed power up to 30W@54V per port for active**

operation

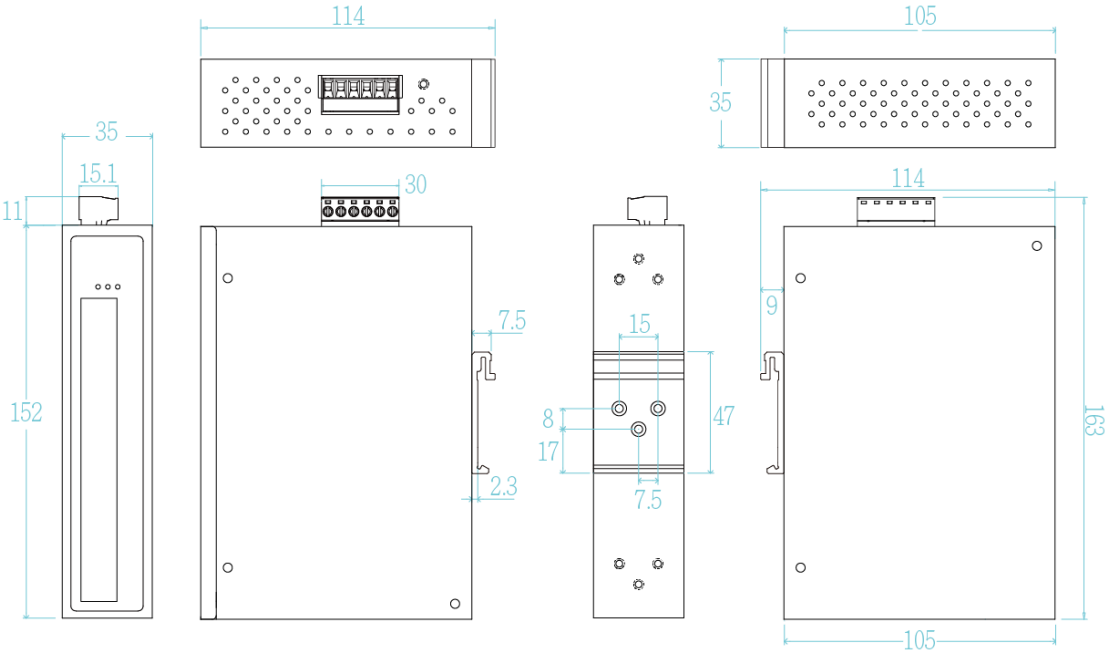
- Dual 9V~56VDC power input for 12V model; dual 9V~36VDC power input for 24V model with ISO7637 compliance; PoE budget 80W at 12V input, 120W at 24V input; dual 45V~56VDC power input for 48V model with PoE budget 240W
- Dual 9V~60VDC power input for 12V model and dual 9V~36VDC power input for 24V model without PoE
- Back-plane (Switching Fabric): 16Gbps
- 10KB Jumbo frame
- Provides EFT protection ±2000 VDC for power line
- Supports ±6000 VDC Ethernet ESD protection
- Galvanic isolation between power input and case ground; between Ethernet port and case ground
- Only 12V or 24VDC input system is applicable for E-mark approval
- Relay alarm output for power fail and alarm
- IP30 metal housing with DIN rail and Wall-mount** design

DIMENSIONS (unit=mm)

PoE model



Non-PoE model



SPECIFICATION

Hardware Specification

Standards	IEEE802.3 10Base-T Ethernet IEEE802.3u 100Base-TX IEEE802.3ab 1000Base-T Ethernet IEEE802.3x Flow Control and Back Pressure IEEE802.3at/af Power over Ethernet
Switch Architecture	Back-plane (Switching Fabric): 16Gbps
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port 1,488,000pps for Gigabit Ethernet port
Mac Address	16K MAC address table
Jumbo frame	10KB
Connectors	10/100/1000T: 8 x ports RJ-45 with Auto MDI/MDI-X function Power & P-Fail connector: 1 x 6-pole terminal block
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5/ 5E/ 6 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5/ 5E/ 6 cable EIA/TIA-568 100-ohm (100m) 1000Base-TX: 2-pair UTP/STP Cat. 5/ 5E/ 6 cable EIA/TIA-568 100-ohm (100m)
LED	Per unit: Power 1 (Green), Power 2 (Green), P-Fail (Red); Ethernet port: Link/Activity (Green), Speed (Amber); PoE: Active (Green)
Operating Humidity	5% ~ 95% (Non-condensing)
Operating Temperature	-20°C~60°C / -4°F~140°F (Standard model) -40°C~75°C / -40°F~167°F(-E model)
Storage Temperature	-40°C~85°C / -40°F~185°F
Power Supply	Non-PoE model: 9V~60VDC (12V model); 9~36VDC (24V model) PoE model: 9V~56VDC (12V model); 9~36VDC (24V model) ; 44~56VDC (48V model)
PoE Budget	240W for 45~56V input (48V model) (50-57VDC input is recommended for 802.3at 30W applications) 80W at 12V input; 120W at 24V input Higher PoE budget can be applied upon request. **

PoE pin assignment	-8 model: RJ-45 port # 1~#8 support IEEE 802.3at/af End-point, Alternative A mode. Per port provides up to 30W Positive (VCC+): RJ-45 pin 1,2 Negative (VCC-): RJ-45 pin 3,6 -6 model: #1~#6 support IEEE 802.3at/af End-point. Alternative A mode. Per port provides up to 30W Positive (VCC+): RJ-45 pin 1,2 Negative (VCC-): RJ-45 pin 3,6
Power Consumption	5W
Galvanic Isolation	Between power input and case ground Between Ethernet port and case ground Between power input and Ethernet port
Case Dimension	PoE model, Metal case. IP-30, 43 (W) x 105 (D) x 152 (H) mm Non-PoE model, Metal case. IP-30, 35 (W) x 105 (D) x 152 (H) mm
Weight	900 g
Installation	DIN Rail and Wall Mount** Design
Relay Alarm	Provides one relay output for power fail and alarm. Alarm Relay current carry ability: 1A @ DC24V
EMI & EMS	FCC Class A, CE EN61000-6-2, CE EN55032 Class A, CE EN55024, CE EN61000-4-2, CE EN61000-4-3, CE EN61000-4-4, CE EN61000-4-5, CE EN61000-4-6, CE EN61000-4-8
Safety	EN62368 (LVD)
Stability Testing	IEC 60068-2-27 (Shock), IEC 60068-2-31 (Shock), IEC 60068-2-64 (Vibration), IEC 60068-2-80 (Vibration)
Vehicle certificate	E13 marking (-12V;-24V model)
MTBF	NA
Warranty	5 years

*Future Release
**Optional

ORDERING INFORMATION

- **IPGS-0008B-48V……..…...P/N: 8351-100**
  8 10/100/1000T w/8 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch; dual 45~56VDC input; -20°C to 60°C
- **IPGS-0008B-6-48V……...P/N: 8351-1001**
  8 10/100/1000T w/6 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch; dual 45~56VDC input; -20°C to 60°C
- **IPGS-0008B-48V-E……..…....P/N: 8351-101**
  8 10/100/1000T w/8 .PoE Mode A 802.3at/af 30W Industrial Ethernet Switch; dual 45~56VDC input; -40°C to 75°C
- **IPGS-0008B-6-48V-E……....P/N:8351-1011**
  8 10/100/1000T w/6 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch; dual 45~56VDC input; -40°C to 75°C
- **IPGS-0008B-12V…….…... ….....P/N: 8351-102**
  8 10/100/1000T w/8 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~56VDC input; -20°C to 60°C
- **IPGS-0008B-6-12V…….....…...P/N:8351-1021**
  8 10/100/1000T w/6 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~56VDC input; -20°C to 60°C
- **IPGS-0008B-12V-E……....P/N: 8351-103**
  8 10/100/1000T w/8 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~56VDC input; -40°C to 75°C
- **IPGS-0008B-6-12V-E……...P/N:8351-1031**
  8 10/100/1000T w/6 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~56VDC input; -40°C to 75°C
- **IPGS-0008B-24V…….…... ….....P/N: 8351-1002**
  8 10/100/1000T w/8 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~36VDC input; compliant with ISO7637-2; -20°C to 60°C
- **IPGS-0008B-6-24V…….....…...P/N:8351-1003**
  8 10/100/1000T w/6 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~36VDC input; compliant with ISO7637-2; -20°C to 60°C
- **IPGS-0008B-24V-E……....P/N: 8351-1004**

8 10/100/1000T w/8 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~36VDC input, compliant with ISO7637-2; -40°C to 75°C

- **IPGS-0008B-6-24V-E……...P/N:8351-1005**
  8 10/100/1000T w/6 PoE Mode A 802.3at/af 30W Industrial Ethernet Switch, dual 9V~36VDC input, compliant with ISO7637-2; -40°C to 75°C
- **IGS-0008B-12V…….....P/N: 8351-114**
  8 10/100/1000T Industrial Ethernet Switch, dual 9V~60VDC input; -20°C to 60°C
- **IGS-0008B-12V-E…….....P/N: 8351-115**
  8 10/100/1000T Industrial Ethernet Switch, dual 9V~60VDC input; -40°C to 75°C
- **IGS-0008B-24V…….....P/N: 8351-1141**
  8 10/100/1000T Industrial Ethernet Switch, dual 9V~36VDC input; compliant with ISO7637-2; -20°C to 60°C
- **IGS-0008B-24V-E…….....P/N: 8351-1142**
  8 10/100/1000T Industrial Ethernet Switch, dual 9V~36VDC input, compliant with ISO7637-2; -40°C to 75°C

OPTIONAL ACCESSORIES

DIN Rail Power

- **NDR-480 Series** 480W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-240 Series** 240W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **NDR-120 Series** 120W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)
- **NDR-75 Series** 75W Single Output Industrial Din Rail Power; 90-264VAC / 127-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C; For 115VAC, please refer to derating curve on NDR-120 Series datasheet)

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