IPGC-0101DSFP

10/100/1000T to 100/1000M SFP 802.3at Industrial PoE Switch Converter; 12V / 48V input

- *IEEE802.3at PoE/PSE Feature*
- *Support auto-sensing LLF / 10K bytes Jumbo Frames*
- *Dual speed SFP cage (100/1000MFX) set by DIP Switch*
- *Dual DC input power: 12V model(9.5~57VDC) ; 48V model(44~56VDC) , supports dual -48VDC input*
- *AREMA** part 11.5.1 compliance*
- *Operating Temperature Range from -40℃ to 75℃(-E model)*
- *Remote enable/disable PoE feeding power through fiber*

OVERVIEW

The Lantech IPGC-0101DSFP is an Industrial Converter converging from 10/100/1000BaseT to 100/1000M-FX dual speed with 802.3at/af PoE support. It supports 10K jumbo frame.

Auto-sensing LLF and Power Fault LED/relay alarm setting by DIP switch

Featured with LLF (Link Loss Forwarding) function, Lantech IPGC-0101DSFP is able to auto cut off connection if one end of connection is down. When copper port disconnects, it will auto turn off fiber port. When fiber port disconnects, it will auto turn off copper port. Smart LLF function alert central side switch immediate remedy action when connection is lost.

Power Fault LED and relay alarm can be off by DIP switch
.

Dual DC input power

IPGC-0101DSFP supports dual input from 9.5V~57VDC (12V model) or 44V~56VDC, dual -48VDC input (48V model) for various application including vehicle, railway, solar panel etc.

Hardened industrial design with extended temperature range ; CE, FCC, LVD, AREMA** part 11.5.1 compliance

It 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.

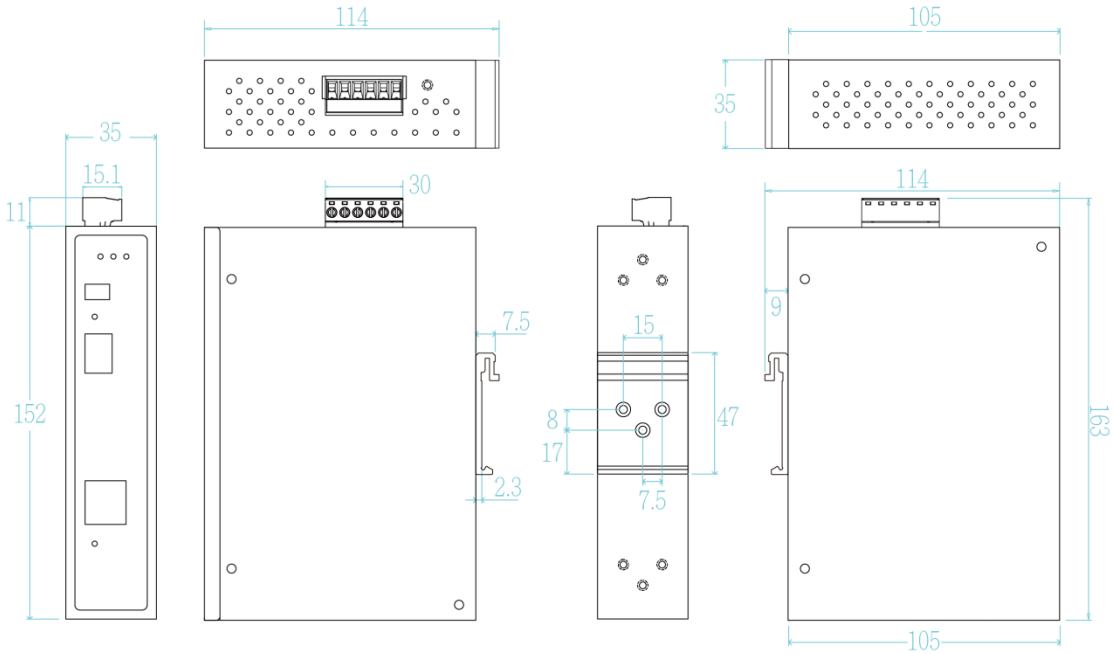
With CE, FCC, LVD and AREMA** part 11.5.1 verification, Lantech IPGC-0101DSFP is best for outdoor community, vehicle, railway, process control automation etc. For more usage flexibilities, IPGC-0101DSP-E supports wide operating temperature from -40°C to 75°C.

FEATURES & BENEFITS

- **System Interface/Performance**
  - *UTP to Fiber Media Converter*
  - *Dual speed SFP cage (100M/1000M)*
  - *RJ-45 port support Auto MDI/MDI-X Function*
  - *Auto Negotiation Speed, Half/Full Duplex*
  - *Jumbo Frame: 10Kbytes*
- **IEEE802.3at PoE/PSE Feature**
- **Supports Link Alarm**
- **Redundancy Power Input with Terminal Block**
- **Metal Housing with DIN Rail and Wall Mount* Design**
- **Supports Wide Operating Temperature (-40°C~ 75°C;-E)**
- **Power polarity auto-reverse* and protection**
- **Remote enable/disable PoE feeding power**
- **AREMA** part 11.5.1 compliance (-AMA models)**

- **Supports Wide Operating Temperature (-40°C~ 75°C;-E)**

DIMENSIONS (unit=mm)



SPECIFICATION

Standards	IEEE802.3 10Base-T IEEE802.3u 100Base-TX/100Base-FX IEEE802.3ab 1000Base-T IEEE802.3x Flow Control and Back pressure IEEE802.3z 1000BaseSX/LX standards IEEE802.3at PoE/PSE
Switch Architecture	Store and Forward
Jumbo Frame	10Kbytes
Fiber parameters	Fiber Core: Multi-mode (62.5/125um, 50/125um) Single-mode (9/125um) Wavelength: 850nm(Multi-mode) 1310nm(Single-mode) Fiber Distance: Based on transceiver type for different distance
Optical Cable	**1.25Gbps:** Multi mode: 0 to 550 m, 850 nm (50/125 µm); 0 to 2 km, 1310 nm (50/125 µm) Single mode: 0 to 10 km/ 30 km/ 40 km, 1310 nm (9/125 µm); 0 to 50 km/ 60 km/ 80km/ 120 km, 1550 nm (9/125 µm) **125Mbps:** Multi mode: 0 to 2 km/ 5 km, 1310 nm (62.5/125 µm) Single mode: 0 to 30 km, 1310 nm (62.5/125 µm) **WDM 1.25Gbps:** Single mode: 0 to 10 km/ 20 km/ 40 km/ 60 km, 1310 nm (9/125 µm); 0 to 80 km, 1490 nm (9/125 µm); 0 to 10 km/ 20 km/ 40 km/ 60 km/ 80 km, 1550 nm (9/125 µm) **WDM 125Mbps:** Single mode: 0 to 20 km/ 40 km/ 60 km/ 80 km, 1310 nm (9/125 µm); 0 to 20 km/ 40 km/ 60 km/ 80 km, 1550 nm (9/125 µm)
DIP Switch	DIP Switch 1: ON: Enables Power Fault Alarm OFF: Disables Power Fault Alarm DIP Switch 2: SFP speed

Polarity protection	Power polarity auto-reverse* and protection
Relay Alarm	Provides one relay output for power fail alarm. Alarm Relay current carry ability: 1A @ DC24V
Connectors	Fiber: Mini-GBIC 3.3V 100/1000M FX RJ-45 Socket: CAT-5 (10/100/1000Mbps) Twisted Pair cable Auto MDI/MDI-X and Auto-Negotiation Function Support
LED	Per unit: Power1 (Green), Power2 (Green), Fault (Red) Fiber: Link/Active (Green) TX: Link/Active (Green), speed (Yellow) PoE : Green
Power Supply	Dual 9.5V~57VDC (12V model) Dual 44V~56VDC, dual -48VDC input (48V model)
Power Consumption	5 Watts max.
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	-20°C~70°C / -4°F~158°F
Case Dimension	Metal case. 35mm (W) x 152mm (H) x 105mm (D) mm
Installation	DIN Rail and Wall Mount* Design
EMI & EMS	FCC Part 15 Class A, CE EN55032 Class A, CE EN55024, CE EN61000-6-2, CE EN61000-4-2 (ESD) Level 3, CE EN61000-4-3 (RS) Level 3, CE EN61000-4-4 (EFT) Level 3, CE EN61000-4-5 ED3 (Surge) Level 3, CE EN61000-4-6 (CS) Level 3, CE EN61000-4-8, EN 50121-4:2015, EN 50121-5:2015 AREMA** part 11.5.1 compliance
Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock),

	IEC60068-2-6 (Vibration)	MTBF	1,884,611 hrs (standards: IEC 62380)
Safety	EN 60950-1	Warranty	5 years

*Optional

ORDERING INFORMATION

Optional AREMA certified models are available with –AMA model names.

- **IPGC-0101DSFP-48V……..P/N: 8350-051**
  10/100/1000T to 100/1000M-FX dual speed Mini-GBIC Industrial Switch Converter with 802.3at PoE, Operating Temperature -20°C to 60°C; Dual 44V~56V DC input
- **IPGC-0101DSFP-48V-E……..P/N: 8350-052**
  10/100/1000T to 100/1000M-FX dual speed Mini-GBIC Industrial Switch Converter with 802.3at PoE, Operating Temperature -40°C to 75°C; Dual 44V~56V DC input
- **IPGC-0101DSFP-12V……..P/N: 8350-053**
  10/100/1000T to 100/1000M-FX dual speed Mini-GBIC Industrial Switch Converter with 802.3at PoE, Operating Temperature -20°C to 60°C; Dual 9.5V~57VDC input
- **IPGC-0101DSFP-12V-E……..P/N: 8350-054**
  10/100/1000T to 100/1000M-FX dual speed Mini-GBIC Industrial Switch Converter with 802.3at PoE, Operating Temperature -40°C to 75°C; Dual 9.5V~57VDC input

OPTIONAL ACCESSORIES

DIN Rail Power

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)
MDR-40 Series	40W Single Output Industrial Din Rail Power; 85-264VAC / 120-370VDC Input Range; Cooling by free air convection; RoHS2 ; Operating Temp. -20°C~70°C (ambient, derating each output at 4% per degree from 60°C ~ 70°C)

Mini GBIC (SFP)

8330-162X	MINI GBIC 1000SX (LC/MM/0.5KM) Transceiver
8330-163X	MINI GBIC 1000SX2 (LC/MM/2KM) Transceiver
8330-165X	MINI GBIC 1000LX (LC/SM/10KM) Transceiver
8340-0591	MINI GBIC 1000LHX (LC/SM/40KM) Transceiver
8330-166	MINI GBIC 1000XD (LC/SM/50KM) Transceiver
8330-169	MINI GBIC 1000XD (LC/SM/60KM) Transceiver
8330-167	MINI GBIC 1000ZX (LC/SM/80KM) Transceiver
8330-170	MINI GBIC 1000EZX (LC/SM/120KM) Transceiver
8330-168	MINI GBIC 10/100/1000T (100m) Transceiver
8330-060	MINI GBIC 100Base (LC/MM/2KM) Transceiver
8330-065	MINI GBIC 100Base (LC/MM/5KM) Transceiver
8330-061	MINI GBIC 100Base (LC/SM/30KM) Transceiver
8330-197	1.25Gbps BiDi SFP 0.5KM Transceiver (WDM 1310)
8330-198	1.25Gbps BiDi SFP 0.5KM Transceiver (WDM 1550)
8330-195	1.25Gbps BiDi SFP 2KM Transceiver (WDM 1310)
8330-196	1.25Gbps BiDi SFP 2KM Transceiver (WDM 1550)
8330-188	1.25Gbps BiDi SFP 10KM Transceiver (WDM 1310)
8330-189	1.25Gbps BiDi SFP 10KM Transceiver (WDM 1550)
8330-186	1.25Gbps BiDi SFP 20KM Transceiver (WDM 1310)
8330-187	1.25Gbps BiDi SFP 20KM Transceiver (WDM 1550)
8330-180	1.25Gbps BiDi SFP 40KM Transceiver (WDM 1310)
8330-182	1.25Gbps BiDi SFP 40KM Transceiver (WDM 1550)
8330-181	1.25Gbps BiDi SFP 60KM Transceiver (WDM 1310)
8330-183	1.25Gbps BiDi SFP 60KM Transceiver (WDM 1550)
8330-184	1.25Gbps BiDi SFP 80KM Transceiver (WDM 1490)
8330-185	1.25Gbps BiDi SFP 80KM Transceiver (WDM 1550)
8330-071	125Mbps BiDi SFP 2KM (WDM 1310) Transceiver
8330-072	125Mbps BiDi SFP 2KM (WDM 1550) Transceiver
8330-069	125Mbps BiDi SFP 20KM (WDM 1310) Transceiver
8330-068	125Mbps BiDi SFP 20KM (WDM 1550) Transceiver
8330-080	125Mbps BiDi SFP 40KM (WDM 1310) Transceiver
8330-082	125Mbps BiDi SFP 40KM (WDM 1550) Transceiver
8330-081	125Mbps BiDi SFP 60KM (WDM 1310) Transceiver
8330-083	125Mbps BiDi SFP 60KM (WDM 1550) Transceiver
8330-084	125Mbps BiDi SFP 80KM (WDM 1310) Transceiver
8330-085	125Mbps BiDi SFP 80KM (WDM 1550) Transceiver
8330-191	Dual Speed SFP 100M/1000M-LX 10KM Transceiver

Lantech Communications Global Inc.
www.lantechcom.tw
info@lantechcom.tw