

IGC-0101DSFP

10/100/1000T to 100/1000M SFP Industrial Switch Converter w/Wide Range DC/AC Input

- Dual speed SFP cage (100/1000MFX) set by DIP Switch
- Wide dual input DC range 18~72VDC w/Galvanic isolation (12V model supports 9~72VDC)
- Wide dual input AC range 18V~36VAC w/Galvanic isolation(AC model)
- Support auto-sensing LLF by DIP Switch / 10K bytes Jumbo Frames
- Operating Temperature Range from -40°C to 75°C(-E model)



OVERVIEW

The Lantech IGC-0101DSFP is an Industrial Converter converting from 10/100/1000BaseT to 100/1000M-FX dual speed. It supports 10K bytes jumbo frame.

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

Featured with LLF (Link Loss Forwarding) function, Lantech IGC-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 power input from 18V~72VDC/18~36VAC with galvanic isolation

IGC-0101DSFP supports dual wide range input from

18V~72VDC (12V model 9V~72VDC) and 18~36VAC (AC model) with galvanic isolation that is good for various application including vehicle, railway, solar panel etc.

Hardened design with extended temperature range

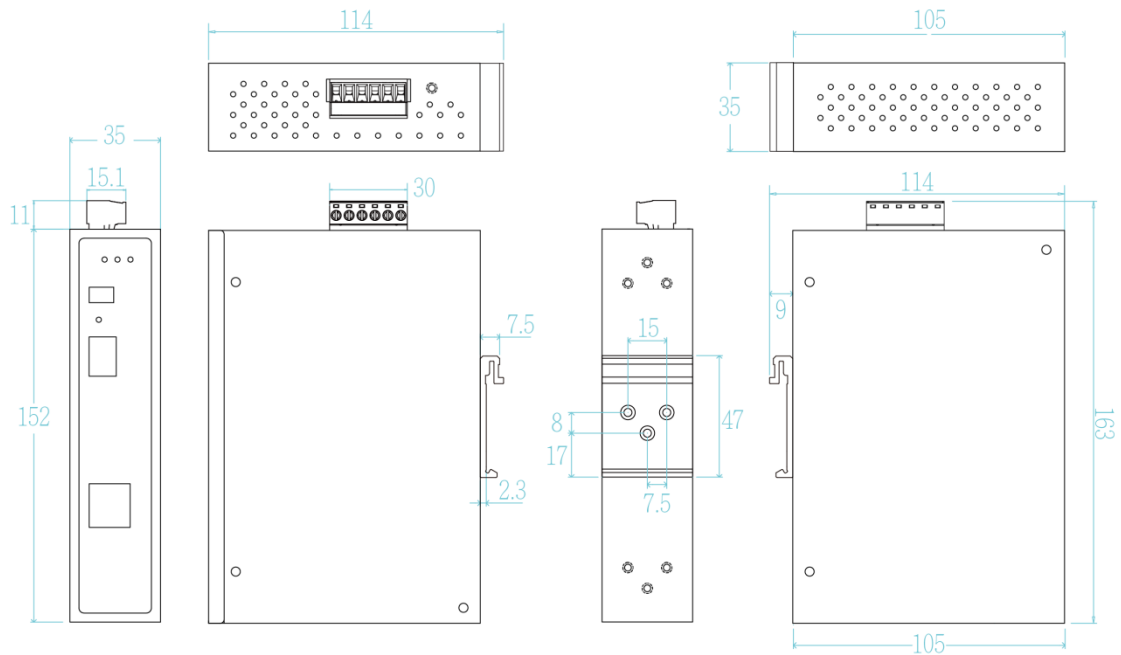
It provides $\pm 2000V$ EFT and $\pm 6000V$ ESD protection, which can reduce unstable situation caused by power line and Ethernet. It has high reliability and robustness coping with extensive EMI/RFI phenomenon, environmental vibration and shocks usually found in Automation, transportation, surveillance, 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.

FEATURES & BENEFITS

- **System Interface/Performance**
 - UTP to Fiber Media Converter
 - RJ-45 port support Auto MDI/MDI-X Function
 - Auto Negotiation Speed, Half/Full Duplex
 - Jumbo Frame: up to 10Kbytes
- **Dual speed SFP cage (100M/1000M)**
- **Provides EFT protection 2000VDC for power line**
- **Supports 6000 VDC Ethernet ESD protection**
- **Power Supply**
 - Wide-range Redundant Dual Power Design
 - Support 18 to 72VDC dual input (12V model support 9 to 72VDC dual input)
 - Support 18 to 36VAC dual input (AC model)
 - Power Polarity Reverse Protect
 - Galvanic isolation
- **Built-in LLF to cut off corresponding connection if one end is disconnected**
- **Power Fault LED and relay alarm can be disabled by DIP switch**
- **IP-30 enclosure with DIN Rail and wall mount** design**
- **Supports Wide Operating Temperature (-40°C~ 75°C) for -E model**
- **Power polarity auto-reverse and protection**
- **Relay alarm output system events**

DIMENSIONS (unit=mm)



SPECIFICATION

Standards	IEEE802.3 10Base-T	Fiber: Link/Active (Green) TX: Link/Active (Yellow),1000M (Green)	
	IEEE802.3u 100Base-TX/100Base-FX IEEE802.3ab 1000Base-T IEEE802.3x Flow Control and Back pressure IEEE802.3z 1000BaseSX/LX standards		
Jumbo Frame	10Kbytes	Power Supply	
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	Terminal Block , dual input power Isolated Input Voltage Range: 18VDC to 72VDC (12V model: 9VDC to 72VDC) Isolated Input Voltage Range: 18VAC to 36VAC (AC model)	
	Optical Cable	Power Consumption	
DIP Switch	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)	5 Watts max.	
	Connectors	Fiber: Mini-GBIC 3.3V 100/1000M FX RJ-45 Socket: CAT-5e (10/100/1000Mbps) Twisted Pair cable Auto MDI/MDI-X and Auto-Negotiation Function Support	Polarity protection
		LED	Per unit: Power1 (Green), Power2 (Green), Fault (Red)
	Relay Alarm	Operating Humidity	Provides one relay output for power fail alarm. Alarm Relay current carry ability: 1A @ DC24V
			Operating Temperature
	Storage Temperature	Case Dimension	Metal case. IP-30, 35mm (W) x 152mm (H) x 105mm (D)
			MTBF
	Installation	EMI & EMS	1,884,611 hrs (standards: IEC 62830)
			Stability Testing
	Safety	Warranty	DIN Rail and Wall Mount** Design
EN 60950-1**			
		5 years	

**Optional

ORDERING INFORMATION

- **IGC-0101DSFP.....P/N: 8350-062**
10/100/1000T to 100/1000M FX Mini-GBIC Industrial Switch Converter, isolated 18V~72VDC input, Operating Temperature -20°C to 60°C
- **IGC-0101DSFP-E.....P/N: 8350-0621**
10/100/1000T to 100/1000M FX Mini-GBIC Industrial Switch Converter, isolated 18V~72VDC input, Operating Temperature -40°C to 75°C
- **IGC-0101DSFP-12V.....P/N: 8350-0611**
10/100/1000T to 100/1000M FX Mini-GBIC Industrial Switch Converter, isolated 9V~72VDC input, Operating Temperature -20°C to 60°C
- **IGC-0101DSFP-12V-E.....P/N: 8350-06111**
10/100/1000T to 100/1000M FX Mini-GBIC Industrial Switch Converter, isolated 9V~72VDC input, Operating Temperature -40°C to 75°C
- **IGC-0101DSFP-AC.....P/N: 8350-063**
10/100/1000T to 100/1000M FX Mini-GBIC Industrial Switch Converter, isolated 18V~36VAC input, Operating Temperature -20°C to 60°C
- **IGC-0101DSFP-AC-E.....P/N: 8350-064**
10/100/1000T to 100/1000M FX Mini-GBIC Industrial Switch Converter, isolated 18V~36VAC input, Operating Temperature -40°C to 75°C

OPTIONAL ACCESSORIES

DIN Rail Power

- **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)
- **MDR-20 Series** 20W 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 2.5% per degree from 50°C ~ 70°C)

Mini GBIC (SFP)

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

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