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 9~72VDC (12V model) w/Galvanic isolation ; dual -48VDC input*
- *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℃ to 75℃(-E model)*
- *19" rack-mount kit for single or dual converter mounting*

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 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 power input from 9V~72VDC/18~36VAC with galvanic isolation

IGC-0101DSFP supports dual wide range input from 9V~72VDC (12V model), dual -48VDC input 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 ±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.

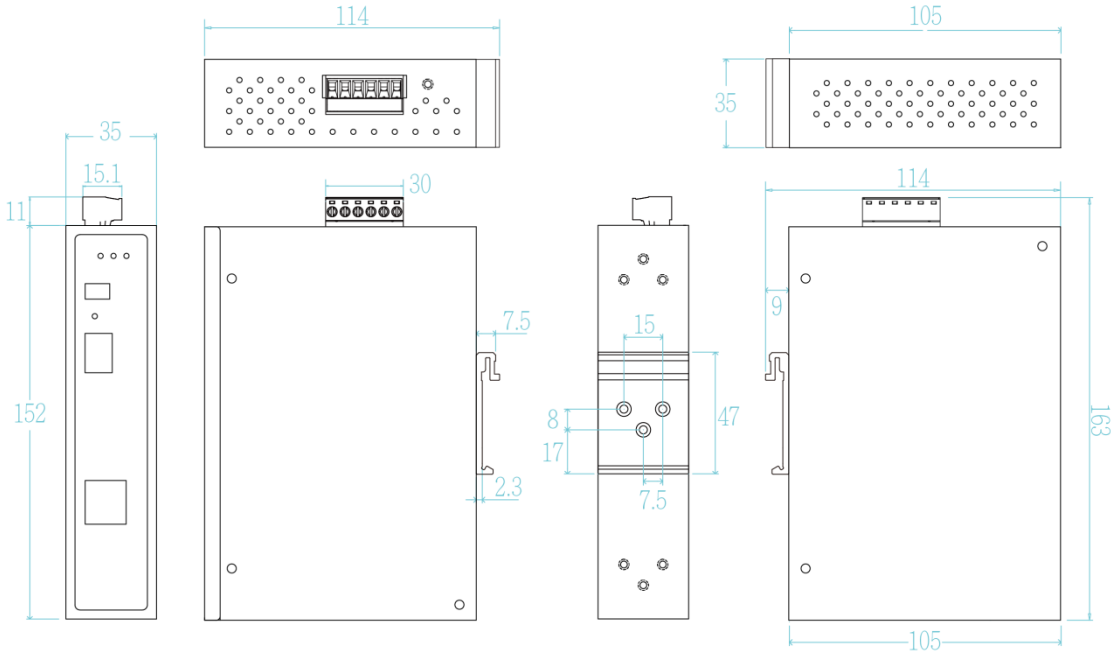
19" Rack mount-able kit for single or dual converter mounting

The optional 19" rack-mount kit can be mounted with single or dual converters.

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 9 to 72VDC dual input*
  - *-48VDC dual power inputs*
  - *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**
- **Optional 19" rackmount-kit for single or dual converter mounting**
- **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 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
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
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
LED	Per unit: Power1 (Green), Power2 (Green), Fault (Red)

	Fiber: Link/Active (Green) TX: Link/Active (Yellow),1000M (Green)
Power Supply	Terminal Block , dual input power Isolated Input Voltage Range: 9VDC to 72VDC (12V model) ; -48VDC dual power input Isolated Input Voltage Range: 18VAC to 36VAC (AC model)
Power Consumption	5 Watts max.
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
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
Case Dimension	Metal case. IP-30, 35mm (W) x 152mm (H) x 105mm (D)
MTBF	1884611 hrs
Installation	DIN Rail and Wall Mount* Design
EMI & EMS	FCC Part 15 Class A, CE EN55032 Class A, CE EN55024, 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 N61000-4-8; EN 50121-4:2015, EN 50121-5:2015
Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
Safety	EN 60950-1
Warranty	5 years

*Optional

ORDERING INFOMATION

- **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: 8350-0612**
  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
- **MBAK-IGC001…….....Single converter 19” rack-mount kit**
- **MBAK-IGC002……Dual converter 19” rack-mount kit**

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)

- **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

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