

# IGC-0101GB

## 10/100/1000T to Mini-GBIC Industrial Switch Converter

- *UL Class I Division II for Group A,B,C and D hazardous location*
- *Built-in LLF & LFP technology*
- *Wide-range redundant power with polarity reverse protection*
- *Wide operating temperature range from -40°C to 75°C (-E model)*



### OVERVIEW

The Lantech IGC-0101GB is an Industrial Converter converging from 10/100/1000BaseT to 1000M speeds. The unique "Link Loss Forwarding (LLF)" feature is capable to cut off whole line link connection whenever there is one end linking down.

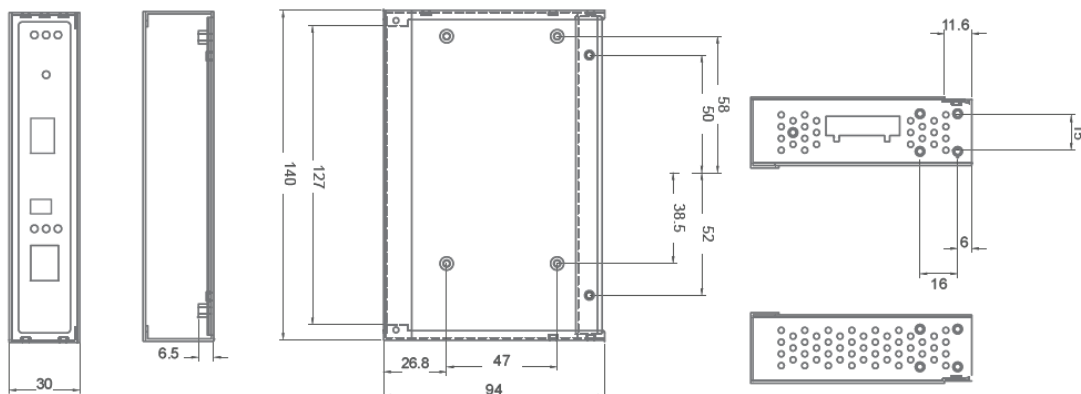
The Lantech IGC-0101GB supports power polarity reverse protection with wide range redundant power input design. Featured with fault relay function, the IGC-0101GB can be connected to alarm system and able to notify of power or network failure event immediately.

With IP30 metal housing and test under extensive Industrial EMI and Safety standards as well as UL Class I Division II approval, the IGC-0101GB can be implemented in hazardous or explosive condition without accelerating the damage. Rigorous mechanical testing has also been undertaken to comply with free fall, shock and vibration stability test requirements. These tests and certifications ensure the long term availability under the critical industrial environments such as inflammable environment where the liquid, gas and vapor etc might present the hazardous condition which generally to be find in mining, oil & gas, chemical, processing automation areas.

### 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: 9Kbytes
  - Store-and-Forward Switching Architecture
- **Built-in Link Lose Forwarding(LLF) & Link Fault Pass-Through (LFP) Technology**
- **IP-30 Metal Housing with DIN Rail and Wall Mount Design**
- **Supports Wide Operating Temperature (-40°C~ 75°C)**
- **Power Supply**
  - Wide-range Redundant Power Design
  - Power Polarity Reverse Protect
  - Overload Current Re-settable Fuse Present
- **UL Class I Division II for Group A,B,C and D hazardous location**
- **Provides EFT protection 3000 VDC for power line**
- **Supports 6000 VDC Ethernet ESD protection**

### 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	Reserve polarity protection	Present
Switch Architecture	Store and Forward	Overload current protection	Present
Jumbo Frame	9Kbytes	Operating Humidity	5% - 95% (Non-condensing)
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	Operating Temperature	-20°C~60°C / -4°F~140°F (Standard model) -40°C~75°C / -40°F~167°F (-E model)
Link Lose Forward	TX → Fiber: If TX port link down, the media converter will force Fiber port to link down Fiber → TX: If Fiber port link down, the media converter will force TX port to link down	Storage Temperature	-40°C~85°C / -40°F~185°F
DIP Switch	DIP Switch 1: ON: Enables Power Alarm OFF: Disables Power Alarm DIP Switch 2: TX → Fiber LLF(Link Lose Forwarding) & LFP (Link Fault Pass-Through) Disable/Enable	Case Dimension	Metal case. IP-30, 30 (W) x 95 (D) x 140 (H) mm
Connectors	Fiber: Mini-GBIC 3.3V RJ-45 Socket: CAT-5 (10/100/1000Mbps) Twisted Pair cable Auto MDI/MDI-X and Auto-Negotiation Function Support	Installation	DIN Rail and Wall Mount Design
LED	Per unit: Power1 (Green), Power2 (Green), Fault (Red) Fiber: Link/Active (Green) TX: Link/Active (Green),1000M (Yellow)	EMI & EMS	FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3 (RS), CE EN61000-4-4 (EFT), CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE EN61000-4-8, CE EN61000-4-11, CE EN61000-4-12, CE EN61000-6-2, CE EN61000-6-4
Power Supply	24VDC (9~56VDC) / -24VDC (-9~-56VDC), 12~36VAC*, Redundant power with polarity reverse protect function and removable terminal block	Safety	UL, cUL, CE/EN60950 UL Class I Division II for Group A,B,C and D hazardous location
Power Consumption	5.3 Watts	Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
		MTBF	525424 hrs
		Warranty	5 years

\*Optional

## ORDERING INFORMATION

- **IGC-0101GB.....P/N: 8350-050**  
10/100/1000T to Mini-GBIC Industrial Switch Converter, Standard Operating Temperature (-20°C to 60°C)
- **IGC-0101GB-E.....P/N: 8350-055**  
10/100/1000T to Mini-GBIC Industrial Switch Converter, , Wide Operating Temperature (-40°C to 75°C)
- **IGC-0101GB-AC.....P/N: 8350-050-AC**  
10/100/1000T to Mini-GBIC Industrial Switch Converter, Standard Operating Temperature (-20°C to 60°C); 12~36VAC
- **IGC-0101GB-E-AC.....P/N: 8350-055-AC**  
10/100/1000T to Mini-GBIC Industrial Switch Converter, , Wide Operating Temperature (-40°C to 75°C); 12~36VAC

## OPTIONAL ACCESSORIES

### DIN Rail Power

- **AD1048-24FS** 24VDC, 2A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 75°C, which means the output is 18 Watts at 75°C.)
- **AD1024-24F** 24VDC, 1A, Wide AC Input, Convection Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 75°C, which means the output is 9 Watts at 75°C.)
- **AD1240-48S** 48VDC, 5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)
- **AD1120-48F** 48VDC, 2.5A, Wide AC Input, Build-in fan Cooled, DIN Rail or Wall Mounted, RoHS, Operating Temp. -20°C~50°C (ambient, derating each output at 2.5% per degree from 50°C ~ 70°C)

**Mini GBIC (SFP)**

■ 8330-162	MINI GBIC 1000SX (LC/0.5km) Transceiver	■ 8330-061	100Base LX 30KM, Single-mode, LC Transceiver
■ 8330-163	MINI GBIC 1000SX2 (LC/2km) Transceiver	■ 8330-188	LTSFP-1000BX-10KM Transceiver (WDM 1310)
■ 8330-165	MINI GBIC 1000LX (LC/10km) Transceiver	■ 8330-189	LTSFP-1000BX-10KM Transceiver (WDM 1550)
■ 8340-0591	MINI GBIC 1000LHX (LC/40km) Transceiver	■ 8330-186	LTSFP-1000BX-20KM Transceiver (WDM 1310)
■ 8330-166	MINI GBIC 1000XD (LC/50km) Transceiver	■ 8330-187	LTSFP-1000BX-20KM Transceiver (WDM 1550)
■ 8330-169	MINI GBIC 1000XD (LC/60km) Transceiver	■ 8330-180	LTSFP-1000BX-40KM Transceiver (WDM 1310)
■ 8330-167	MINI GBIC 1000ZX (LC/80km) Transceiver	■ 8330-182	LTSFP-1000BX-40KM Transceiver (WDM 1550)
■ 8330-170	MINI GBIC 1000EZ (120km) Transceiver	■ 8330-181	LTSFP-1000BX-60KM Transceiver (WDM 1310)
■ 8330-168	MINI GBIC 10/100/1000T (100m) Transceiver	■ 8330-183	LTSFP-1000BX-60KM Transceiver (WDM 1550)
■ 8330-060	100Base FX 2KM, Multi-mode, LC Transceiver	■ 8330-184	LTSFP-1000BX-80KM Transceiver (WDM 1490)
■ 8330-065	100Base FX 5KM, Multi-mode, LC Transceiver	■ 8330-185	LTSFP-1000BX-80KM Transceiver (WDM 1550)

**Lantech Communications Global Inc.**

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