

# IEC-0101FT

## 1-Port 10/100TX to 100M-FX Slim Type Converter

- DNV Type Approved for Ships, Craft and Off-shore Platforms
- UL Class I Division II for Group A,B,C and D hazardous location
- Unique DIP switches to set the operation mode
- Built-in LLF and LFP technology
- Wide-range redundant power with polarity reverse protection



### OVERVIEW

The Lantech IEC-0101FT Industrial Converter is a slim type Industrial converter which has a unique DIP switch to adjust 100M duplex mode and LLF (Link Loss Forwarding) function.

Through the DIP switch, you can also set power alarm and pure converter mode. Featured with LLF function, the Lantech IEC-0101FT is able to auto-cut off connection if one end of connection is down. The built-in LFP (Link Fault Pass-Through) scheme is to cut off Fiber TX or RX when either one has lost connection then trigger LLF to cut off all connection. Smart LLF and LFP functions alert central side switch immediate remedy action when connection is lost.

The Lantech IEC-0101FT is designed to meet the demands of industrial environments, comes packaged in a robust IP 30 housing and has been tested extensively to meet Industrial EMI

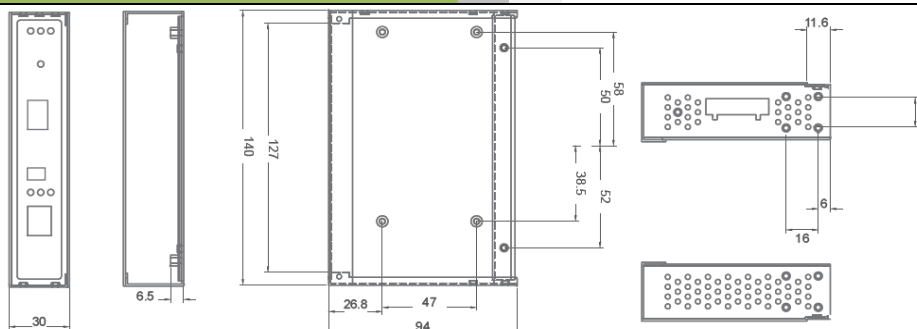
and EMC standards. With UL Class I Division II approval, IEC-0101FT can be implemented in hazardous or explosive condition without accelerating the potential damage. It is the best choice to be installed in inflammable environment where the liquid, gas and vapor etc might present the hazardous condition which generally to be find in mining, oil & gas, chemical, processing automation areas.

Lantech DNV-Type Approval IEC-0101FT-DNV model meets with the most critical test criteria in DNV Type test directives consisting of MED (Marine Equipment Directive), EMC (Electromagnetic Compatibility Directive) and LVD (Low Voltage Directive) in which vibration, high voltage, compass safe distance, salt mist tests, humidity etc are conducted to ensure the switch sustaining the harsh on-board environments often founded in Ships, Crafts and Offshore platforms.

### 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
  - Store-and-Forward Switching Architecture
  - -E / DNV model supports wide operating temperature from -40°C to 75°C
  - Built-in LLF & LFP Technology
- Provides EFT protection 2000VDC for power line
- Supports 6000 VDC Ethernet ESD protection
- **Power Supply**
  - Wide-range Redundant Dual Power Design
  - Support 9 to 56VDC /-9 to -56VDC power inputs
  - Overload current resettable Fuse Present
  - Power Polarity Reverse Protect
- IP-30 enclosure with DIN Rail and wall mount design
- UL Class I Division II for Group A,B,C and D hazardous location

### DIMENSIONS (unit=mm)



**SPECIFICATION**

Hardware Specification		LED	Per unit: Power 1 (Green), Power 2 (Green), Fault(Red) TX: Link/Active (Green), 100M(Yellow) Fiber: Link/Active (Green), Full duplex/Collision (Yellow)
Standards	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure	Operating Humidity	5% ~ 95% (Non-condensing)
Protocol	CSMA/CD	Operating Temperature	-20°C~60°C / -4°F~140°F (Standard model) -40°C~75°C / -40°F~167°F (-E / DNV model)
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port	Storage Temperature	-40°C~85°C / -40°F~185°F
Connectors	SC/ST (Multi-mode): 50/125um~62.5/125um SC/ST (Single-mode): 9/125um Available distance: 2km (Multi-mode) / 30km(Single-mode) Wavelength: 1310nm (Multi-mode/Single-mode) 10/100TX: 1 x RJ-45 with auto MDI/MDI-X function [Multi-Mode] power budget: Min: 9dB, MAX: 19dB. [Single-Mode] power budget: Min: 19dB, MAX: 26dB.	Case Dimension	Metal case,IP-30; 30mm(W)x95mm(D)x140mm(H)
		Weight	600 g
Transfer packet size	64bytes to 1522 bytes (with VLAN tag).	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
Mac Address	2K MAC address table	Safety	UL, cUL, CE/EN60950 UL Class I Division II for Group A,B,C and D hazardous location
Network Cable	10Base-T: 2-pair UTP/STP Cat. 3, 4, 5, 6 cable EIA/TIA-568 100-ohm (100m) 100Base-TX: 2-pair UTP/STP Cat. 5, 6 cable EIA/TIA-568 100-ohm (100m)	Stability Testing	IEC60068-2-32 (Free fall), IEC60068-2-27 (Shock), IEC60068-2-6 (Vibration)
DIP Switch	DIP Switch 1: OFF: Disables Port /Power Alarm; ON: Enables Port /Power Alarm DIP Switch 2: OFF: Disables LLF (Link Lose Forwarding) & LFP (Link Fault Pass-Through) ; ON: Enables LLF & LFP DIP Switch 3: OFF: 100Base-FX Full-mode; ON: 100Base-FX Half-mode DIP Switch 4: OFF: Switching mode; ON: Media mode (100TX to 100FX)	MTBF	405486 hrs
Power Consumption	2.74 Watts	Power Supply	24VDC (9~48VDC),12~36VAC*, Redundant power with polarity reverse protect function and removable terminal block
Reserve polarity protection	Present	Warranty	5 years
Overload current protection	Present		

\*Optional

**ORDERING INFOMATION**

- **IEC-0101FT-SC-MM.....P/N: 8350-020**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Multi-mode, 2KM, Standard Operating Temp. (-20°C~60°C)
- **IEC-0101FT-SC-SM.....P/N: 8350-021**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Single-mode, 30KM, Standard Operating Temp. (-20°C~60°C)
- **IEC-0101FT-ST-MM.....P/N: 8350-022**  
1 10/100TX to 100FX Industrial Converter, ST Connector, Multi-mode, 2KM, Standard Operating Temp. (-20°C~60°C)
- **IEC-0101FT-ST-SM.....P/N: 8350-023**  
1 10/100TX to 100FX Industrial Converter, ST Connector, Single-mode, 30KM, Standard Operating Temp. (-20°C~60°C)
- **IEC-0101FT-SC-MM-E.....P/N: 8350-025**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Multi-mode, 2KM, Wide Operating Temp. (-40°C~75°C)
- **IEC-0101FT-SC-SM-E.....P/N: 8350-026**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Single-mode, 30KM, Wide Operating Temp. (-40°C~75°C)
- **IEC-0101FT-SC-MM-DNV.....P/N: 8350-025DNV**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Multi-mode, 2KM, Wide Operating Temperature. (-40°C~75°C);  
DNV Type Approved for maritime application  
\*Redundant power without polarity reverse protect function

- **IEC-0101FT-SC-SM-DNV.....P/N: 8350-026DNV**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Single-mode, 30KM, Wide Operating Temperature (-40°C~75°C); DNV Type Approved for maritime application  
\*Redundant power without polarity reverse protect function
- **IEC-0101FT-SC-MM-AC.....P/N: 8350-020-AC**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Multi-mode, 2KM, Standard Operating Temp. (-20°C~60°C); 12~36VAC
- **IEC-0101FT-SC-SM-AC.....P/N: 8350-021-AC**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Single-mode, 30KM, Standard Operating Temp. (-20°C~60°C); 12~36VAC
- **IEC-0101FT-ST-MM-AC.....P/N: 8350-022-AC**  
1 10/100TX to 100FX Industrial Converter, ST Connector, Multi-mode, 2KM, Standard Operating Temp. (-20°C~60°C); 12~36VAC
- **IEC-0101FT-ST-SM-AC.....P/N: 8350-023-AC**  
1 10/100TX to 100FX Industrial Converter, ST Connector, Single-mode, 30KM, Standard Operating Temp. (-20°C~60°C); 12~36VAC
- **IEC-0101FT-SC-MM-E-AC.....P/N: 8350-025-AC**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Multi-mode, 2KM, Wide Operating Temp. (-40°C~75°C); 12~36VAC
- **IEC-0101FT-SC-SM-E-AC.....P/N: 8350-026-AC**  
1 10/100TX to 100FX Industrial Converter, SC Connector, Single-mode, 30KM, Wide Operating Temp. (-40°C~75°C); 12~36VAC
- **IEC-0101FT-SC-MM-5KM.....P/N: 8350-002**  
1 10/100TX to 100FX Multi-mode, 5KM Industrial Converter, Standard Operating Temperature (-20°C~60°C)
- **IEC-0101FT-ST-MM-5KM.....P/N: 8350-003**  
1 10/100TX to 100FX Multi-mode, 5KM Industrial Converter, Standard Operating Temperature (-20°C~60°C)
- **IEC-0101FT-E-SC-MM-5KM.....P/N: 8350-004**  
1 10/100TX to 100FX Multi-mode, 5KM Industrial Converter, Wide Operating Temperature (-40°C~75°C);
- **IEC-0101FT-E-ST-MM-5KM.....P/N: 8350-005**  
1 10/100TX to 100FX Multi-mode, 5KM Industrial Converter, Wide Operating Temperature (-40°C~75°C);

**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)

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