

# IPEC-0101FT

# 1-Port 10/100TX to 100M-FX Slim Type Media Converter w/PoE injector

- Built-in LFP & LLF technology
- Wide operating temperature range from -40 °C to 75 °C (-E model)
- Redundant power supply
- Provides 2K VDC EFT and 6K VDC ESD protection













#### **OVERVIEW**

The Lantech IPEC-0101FT Industrial PoE Converter is a slim type Industrial media converter with PoE injector built-in in which has an 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.

Complying with IEEE802.3af PoE standard, the IPEC-0101FT is able to feed up to 15.4W from its PoE port. The IPEC-0101FT also supports 2000V EFT and 6000V ESD protection, reducing unstable condition caused by power line and Ethernet.

Lantech's each UTP to Fiber converter equips LLF function for

auto-cut off all connection if one end is link down. The built-in LFP (Link Fault Pass-Through) function 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 function alerts central side switch immediate remedy action when connection is lost.

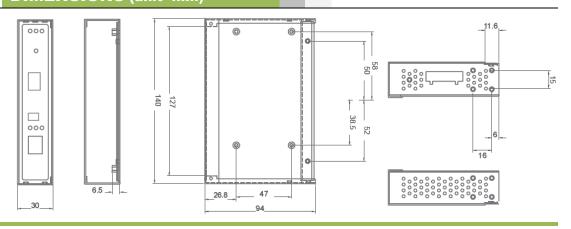
The Lantech IPEC-0101FT is the best Industrial PoE converter for longer distance demand where are placed in outdoor or tight space cabinet for various applications like Factory Automation, Building Automation, SCADA, Warehousing, Traffic Control or Video Surveillance.

#### **FEATURES & BENEFITS**

- System Interface/Performance
  - · UTP to Fiber Media Converter
  - · Built-in 1 port PoE Injector function
  - · RJ-45 port support Auto MDI/MDI-X Function
  - · Auto Negotiation Speed, Half/Full Duplex
  - · Store-and-Forward Switching Architecture
- Wide Operating Temperature range from -40°C to 75°C (-E model)
- Built-in Link Loss Forwarding (LLF) & Link Fault
   Pass-Through (LFP) Technology

- Power Supply
  - DC 48V Redundant Power Supply
  - · Overload current resettable Fuse Present
- Case/Installation
  - · IP-30 Protection
  - · DIN Rail and Wall Mount Design
- Provides EFT protection 2000VDC for power line
- Supports 6000 VDC Ethernet ESD protection

# **DIMENSIONS** (unit=mm)



Datasheet Version 1.1



# **SPECIFICATION**

Hardware Specification		DIP Switch	DIP Switch 1: OFF: Disables Port /Power Alarm ON:
IEEE Standards Link Lose Forward	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet IEEE802.3x Flow Control and Back Pressure IEEE 802.3af Power over Ethernet TX to Fiber: If TX port link down, the media converter will force Fiber port to link down, the media Fiber to TX: If Fiber port link down, the media		Enables Port /Power Alarm DIP Switch 2: OFF: Disables LLF (Link Loss Forwarding) & LFP (Link Fault Pass- Through) ON: Enables LLF (Link Lose Forwarding) & LFP (Link Fault Pass-Through) 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)
PoE pin assignment	converter will force TX port to link down RJ-45 port support IEEE 802.3af End-point, Alternative A mode.	Power Supply Power	48VDC (45~56VDC), Redundant power with removable terminal block 2.6 Watts (Unload)
Switch Architecture	Positive (VCC+): RJ-45 pin 1, 2.  Negative (VCC-): RJ-45 pin 3, 6. Data (1,2,3,6)  Store-and –Forward	Consumption	3.3 Watts (Full load: Only Ethernet) 15.7 Watts (Full load: Only PD load) 16.4 Watts (Full load)
	Packet throughput ability (Full-Duplex): 1.488Mpps @64bytes	Overload current protection	Present
Transfer Rate	14,880pps for Ethernet port 148,800pps for Fast Ethernet port	Operating Humidity	5% ~ 95% (Non-condensing)
MAC Address Connectors	2K Mac address table SC (Multi-mode): 50/125um~62.5/125um SC (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: 19dB , MAX: 19dB. [Single-Mode] power budget : Min: 19dB , MAX:	Operating Temperature Storage Temperature Case Dimension Weight EMI & EMS	-20°C-60°C / 4°F-140°F (Standard model) -40°C-75°C / -40°F-167°F (-E model) -40°C-85°C / -40°F-185°F Metal case,IP-30; 30mm(W)x95mm(D)x140mm(H) 600 g FCC Class A, CE EN61000-4-2 (ESD), CE EN61000-4-3(RS), CE EN-61000-4-4 (EFT), CE EN61000-4-5 (Surge), CE EN61000-4-6 (CS), CE
	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),
Protocol	CSMA/CD	MEDE	IEC60068-2-6(Vibration)
LED	Per unit: Power 1 (Green), Power 2 (Green), Fault(Red) TX: Link/Active (Green), 100M(Yellow), Feeding Power (Green) Fiber: Link/Active (Green), Full duplex/Collision (Yellow)	MTBF Warranty	391515 hrs 5 years

# **ORDERING INFOMATION**

■ IPEC-0101FT......P/N: 8350-900

1 10/100TX to 100FX Industrial Converter w/PoE injector, Standard Operating Temperature (-20°C~ 60°C)

1 10/100TX to 100FX 30KM Industrial Converter w/PoE injector, Standard Operating Temperature (-20°C~ 60°C)

■ IPEC-0101FT-E.....P/N: 8350-905

1 100/100TX to 100FX Industrial Converter w/PoE injector, Wide Operating Temperature (-40°C~75°C)

■ IPEC-0101FT-30KM-E.....P/N: 8350-906

 $1\ 10 \text{//} 100 \text{TX to } 100 \text{FX Industrial Converter } 30 \text{KM w/PoE injector, Wide Operating Temperature (-} 40^{\circ} \text{C} \sim 75^{\circ} \text{C})$ 

# **OPTIONAL ACCESSORIES**

#### **DIN Rail Power**

AD1240-48S

■ 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  $50^{\circ}\text{C} \sim 75^{\circ}\text{C}$ , which means the output is 18 Watts at  $75^{\circ}\text{C}$ .)

■ 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  $50^{\circ}\text{C} \sim 75^{\circ}\text{C}$ , which means the output is 9 Watts at  $75^{\circ}\text{C}$ .)

 $48 \text{VDC}, 5\text{A}, \text{Wide AC Input}, \text{Build-in fan Cooled}, \text{DIN Rail or Wall Mounted}, \text{RoHS}, \text{Operating Temp. } -20^{\circ}\text{C} \sim 50^{\circ}\text{C}$ 

(ambient, derating each output at 2.5% per degree from  $50^{\circ}\text{C} \sim 70^{\circ}\text{C}$ )

■ 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  $50^{\circ}\text{C} \sim 70^{\circ}\text{C}$ )

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