

# Optolinx IMP-100A

Industrial 10/100BaseTX to 100BaseFX Industrial PoE Media Converter

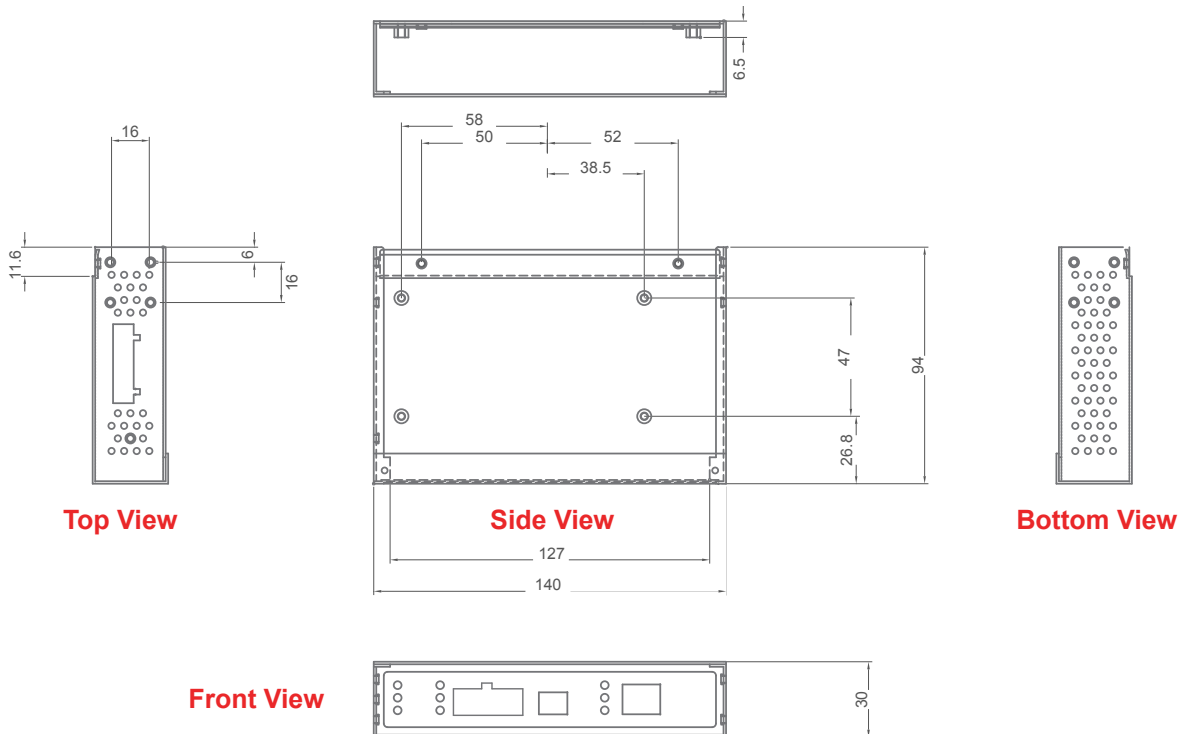


## Features

- ▶ Embedded 1 Port PoE Injector Function
- ▶ RJ-45 Port Support Auto MDI/MDI-X Function
- ▶ Store-and-Forward Switching Architecture
- ▶ Built-in Link Loss Forwarding (LLF) & Link-Fault-Pass-Through (LFP)
- ▶ Wide Operating Temperature Model Available (-40° C to 80° C)
- ▶ DC 48V Redundant Power
- ▶ Provides EFT Protection 3000 VDC For Power Line
- ▶ Supports 6000 VDC Ethernet ESD Protection
- ▶ DIN-Rail or Wall Mountable
- ▶ IP30 Protection
- ▶ 5-Year Warranty



## ▶ Dimensions (unit = mm)



## ► Specifications

### Standard

IEEE 802.3 10BaseT Ethernet  
IEEE 802.3u 100BaseTX/100BaseFX  
IEEE 802.3x Flow Control and Back-Pressure  
IEEE 802.3af Power over Ethernet

### Switch Architecture

Store and forward

### Transfer Rate

14,880pps for Ethernet Port  
148,800pps for Fast Ethernet Port

### PoE Pin Assignment

RJ-45 Port Supports IEEE 802.3af End-Point, Alternative A Mode  
Positive (VCC+): RJ-45 Pin 1, 2  
Negative (VCC-): RJ-45 Pin 3, 6  
Data (1, 2, 3, 6)

### Connector

100M Fiber: 1 x SC (Multi-Mode) or SC (Single-Mode, 30Km)  
10/100TX: 1 x RJ-45 w/ Auto MDI/MDI-X & Auto-Negotiation Function, Supports PoE Injector Function

### Network Cable

10BaseT: 2-Pair UTP/STP Cat. 3, 4, 5 Cable  
EIA/TIA-568 100-ohm (100m)  
100BaseTX: 2-Pair UTP/STP Cat. 5 Cable  
EIA/TIA-568 100-ohm (100m)

### Fiber Parameters

Fiber Core: Multi-Mode (62.5/125um ~ 50/125um)  
Single-Mode (9/125um ~ 10/125um)  
Wavelength: 1310nm  
Fiber Distance: Multi-Mode Fiber 2Km  
Single-Mode Fiber 30Km

### Link Loss Forward

TX → Fiber: If TX port link down, will force Fiber port to link down  
Fiber → TX: If Fiber port link down, will force TX port to link down

### DIP Switch

DIP 1: ON = Enables Port/Power Alarm  
OFF = Disables Port/Power Alarm  
DIP 2: ON = Enables Link Loss Forward & Link-Fault-Pass-Through  
OFF = Disables Link Loss Forward & Link-Fault-Pass-Through  
DIP 3: ON = 100BaseFX Half-Mode  
OFF = 100BaseFX Full-Mode  
DIP 4: ON = Media Mode (100TX to 100FX)  
OFF = Switching Mode

### LED

Unit: Power, Power 1, Power 2 (Green), Fault (Red)  
TX: Link/Act (Green), 100M (Yellow), Feeding Power (Green)  
Fiber: Link/Act (Green), Full Duplex/Collision (Yellow)

### Power

DC 48V Redundant power

### Power Consumption

3.3 Watts (without PoE), 16.4 Watts (Full Load with PoE)

### Overload Current Protection

Present

### Mechanical

Casing: IP30 Metal Case  
Dimension (W x H x D): 30 x 140 x 95 mm (1.18 x 5.51 x 3.74 in.)  
Installation: DIN-Rail/Wall Mountable

### Operation Temperature

Standard: -10° C to 70° C (14° F to 158° F)  
Wide Operating Temperature: -40° C to 80° C (-40° F to 176° F)

### Operation Humidity

5% to 95% (Non-condensing)

### Storage Temperature

-40° C to 85° C

### EMI

FCC Class A  
CE EN6100-4-2/EN6100-4-3/EN6100-4-4/EN6100-4-5/EN6100-4-6/  
EN6100-4-8/EN6100-4-11/EN6100-6-2/EN6100-6-4

### Safety

UL, cUL, CE EN60950-1

### Stability Testing

Shock: IEC60068-2-27  
Free Fall: IEC60068-2-32  
Vibration: IEC60068-2-6

### Warranty

5-Year Warranty

## ► Ordering Information

IMP-100A-M  
IMP-100A-S3  
IMP-100A-M-T  
IMP-100A-S3-T

Industrial PoE Media Converter, Multi-Mode Fiber, SC, 2 Km  
Industrial PoE Media Converter, Single-Mode Fiber, SC, 30 Km  
Industrial PoE Media Converter, Multi-Mode Fiber, SC, 2 Km, Wide Operatng Temperature  
Industrial PoE Media Converter, Single-Mode Fiber, SC, 30 Km, Wide Operating Temperature

### Optional Accessories

CBF-SC01ST-MD  
CBF-SC01SC-MD  
CBF-SC01SC-SS  
AD-SCM-STF-M  
AD-SCM-STF-S

SC to ST Multi-Mode, Duplex Fiber Cable (1 Meter)  
SC to SC Multi-Mode, Duplex Fiber Cable (1 Meter)  
SC to SC Single-Mode, Simplex Fiber Cable (1 Meter)  
SC (Male) to ST (Female) Duplex Adapter (Multi-Mode)  
SC (Male) to ST (Female) Duplex Adapter (Single-Mode)

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