



# 4 FE PoE + 1 FE Multi-Mode SC Industrial Switch (2km)



IFE-0501

H/W Version: 1

The LevelOne IFE-0501 4-Port 10/100TX PoE and 1-port 100Base SC Industrial Fast Ethernet Switch combines PoE capability and 4-port switching into a small heavy-duty metal casing for Industrial PoE applications. The IEEE802.3af Power over Ethernet compliant switch connects to a 48V DC power source to provide power and 10/100Mbps data transmission over Ethernet cabling to attached devices.

### Industrial PoE Application

The IFE-0501 Industrial PoE Switch is designed for network devices operating in harsh environments. The ports and PoE injector are enclosed in a robust and durable metal casing. The switch is easily installed at network edges where AC power is not always available. In addition, the 48V AC-DC Power Supply Package\* can be equipped with IFE-0500 at the place where lacking of DC power support; this package can allow the AC power source be transformed into DC 48V power and work with terminal block DC input on IFE-0501.

The switch is built to operate between -10°C to 60°C in 95% non-condensing humidity and is suitable

for covered outdoor installation. Mounting options include wall-mounting, DIN-rail mounting and stand-alone panel mounting.

### Extending the Network

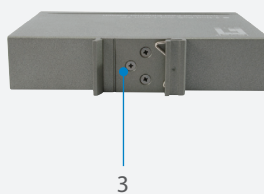
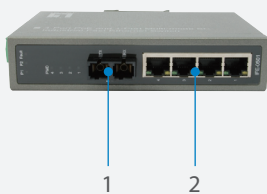
The 1-Port SC Fiber port links the IFE-0501 to a network to provide network extensibility to network edges where few AC power outlets are located. The fiber port supports Multi-Mode and can be connect to a network 2km away. The port support Auto MDI/MDI-X and the switch uses standard Store-and-Forward switching architecture with a 1Gbps backplane and 1K MAC address table.

### Auto-Sensing Connected PD Devices

The IFE-0501 features auto-sensing for providing power to IEEE 802.3af PoE compliant attached PD devices. This ensures that non-PoE devices are not damaged by unnecessary power when connected.

The IFE-0501 also supports over-current protection, under-current detection and fault protection.

\*Power supply package is not included



1. 100Base Multi-Mode SC Fiber Connector
2. Fast Ethernet PoE RJ-45 Ports
3. DIN-Rail
4. Terminal Block DC Input

### Key Features

- Industrial PoE Switch for harsh network applications
- 4-port 10/100TX with embedded PoE injector
- 1-port Multi-Mode SC Fiber Connector for connecting to LAN via Fiber Optic cable
- Over-current protection
- Features Auto-sensing for detecting PoE or non-PoE devices
- Rigid metal casing for covered outdoor application
- DIN-Rail, wall-mounting and stand-alone installation

### Related Products



**IFE-0500**  
4 FE PoE + 1 FE Industrial Switch



**IFE-0502**  
4 FE PoE + 1 FE Single-mode SC Industrial Switch (30km)

## Technical Specification

### Standards Compliance

IEEE 802.3 10Base-T Ethernet  
 IEEE 802.3u 100Base-TX and 100Base-FX Fast Ethernet  
 IEEE802.3x Flow Control and Back Pressure  
 IEEE802.3af Power over Ethernet

### Hardware Specification

#### Switch Architecture

Back-plane: 1.0Gbps  
 Packet throughput ability: 1.488Mpps @64bytes

#### Transfer Rate

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

#### MAC Address

1K MAC address table

#### Protocol

CSMA/CD

#### Connector

4x RJ-45 with auto MDI/MDI-X function  
 1 x SC type connector for Multi-mode type fiber cable  
 Support 4 PoE injector function

#### Network Cable

10Base-T:  
 - 2-pair UTP/STP Cat. 3, 4, 5, 5e cable  
 - EIA/TIA-568 100-ohm (100m)  
 100Base-TX:  
 - 2-pair UTP/STP Cat. 5/5e cable  
 - EIA/TIA-568 100-ohm (100m)

#### Optical Fiber

Distance: Multi mode: 2km, 1300nm  
 Min. TX Output: Multi mode: -20dBm, Single mode: -5dBm  
 Max. TX Output: Multi mode: -14dBm, Single mode: 0dBm  
 Sensitivity: -34 to -30dBm (Multi-mode)

### Physical Specification

#### LED

Power 1 (Green), Power 2 (Green), Fault (Red)  
 Link/Activity (Green), Full duplex/Collision (Yellow)  
 Feeding PoE Power (Green)

### Power Supply

48V DC Redundant Power with connective removable terminal block

### Power Consumption

3.4Watts (without PoE)  
 57 Watts (Full load with PoE)

### Operating Humidity

5%~95% (Non-condensing)

### Operating Temperature

-10°C ~ 60°C (14°F ~ 140°F)

### Storage Temperature

-40°C ~ 85°C

### Case Dimension

IP-30, 30mm (W) x 95mm (D) x 140mm (H) (Metal case)

### Installation

DIN rail kit for DIN-type cabinet install  
 Wall-mount ear for wall mounting

### Certification

#### EMI

FCC Class A  
 CE EN61000-4-2/3/4/5/6/8/11/12  
 CE EN61000-6-2  
 CE EN61000-6-4

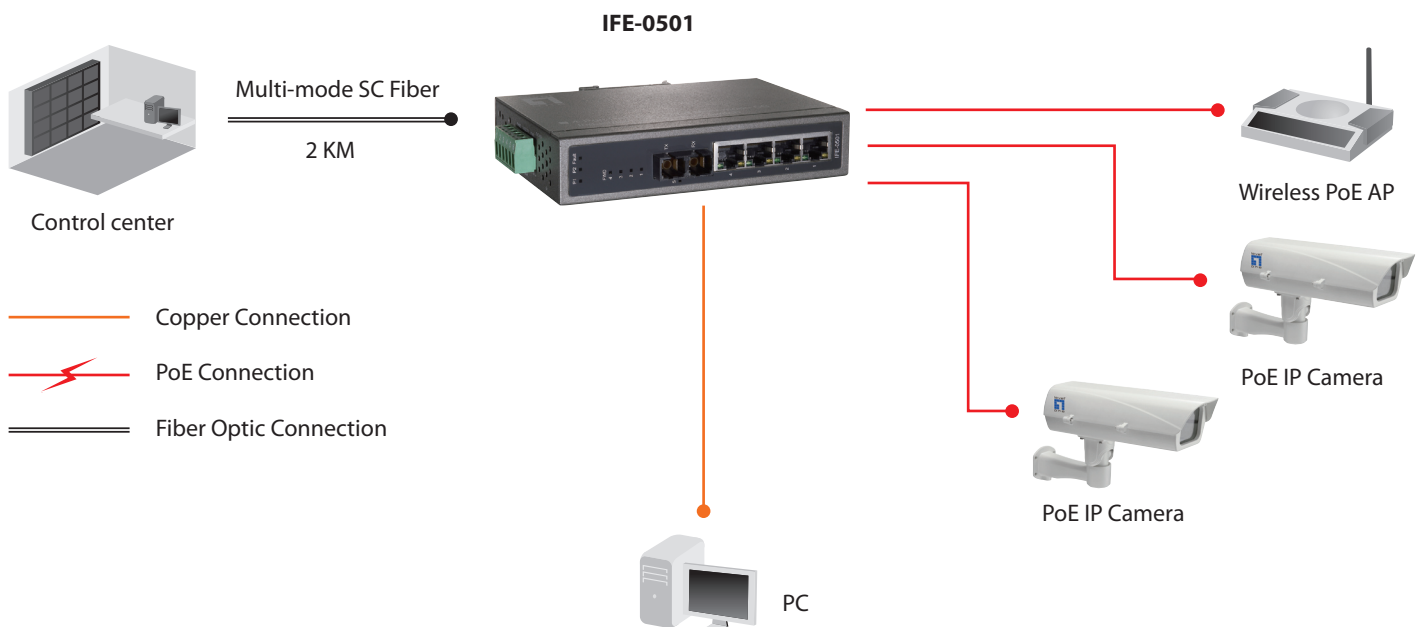
#### Safety

UL  
 cUL  
 CE/EN60950-1

#### Stability Testing

IEC60068-2-32 (Free fall)  
 IEC60068-2-27 (Shock)  
 IEC60068-2-6 (Vibration)

## Product Diagram



## Order Information

**IFE-0501:** 4 FE PoE + 1 FE Multi-Mode SC Industrial Switch (2km)

**POW-4801:** 48V AC-DC Power Supply Package (Optional Accessories)

## Package Content

### **IFE-0501**

Pluggable Terminal Block

2 wall mount plates and 6 screws

DIN-Rail (attached on the switch)

CD Manual

### **POW-4801** (Accessories, not included)

48V AC-DC Power Adapter

Power Cord

DC Power Jack Converter