

# 4 FE PoE + 1 FE Single-mode SC Industrial Switch (30km)



IFE-0502

#### H/W Version: 1

The LevelOne IFE-0502 4-Port 10/100TX PoE and 1-port 100Base SC Industrial Fast Ethernet Switch combines PoE capability and 4-port switching into a small heavyduty 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-0502 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-0502.

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 standalone panel mounting.

## **Extending the Network**

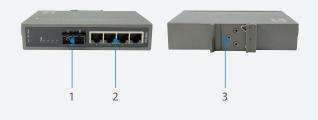
The 1-Port SC Fiber port links the IFE-0502 to a network to provide network extendibility to network edges where few AC power outlets are located. The fiber port supports Single-Mode and can be connect to a network 30km away. The port support Auto MDI/MDI-X and the switch uses standard Storeand-Forward switching architecture with a 1Gbps backplane and 1K MAC address table.

## **Auto-Sensing Connected PD Devices**

The IFE-0502 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-0502 also supports over-current protection, under-current detection and fault protection.

\*Power supply package is not included





- 1. 100Base Single-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 Single-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-0501 4 FE PoE + 1 FE Multi-Mode SC Industrial Switch (2km)

#### **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 Single-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: Single mode: 30km, 1310nm Min. TX Output: Single mode: -5dBm Max. TX Output: Single mode: 0dBm Sensitivity: -36 to -32dBm (Single-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

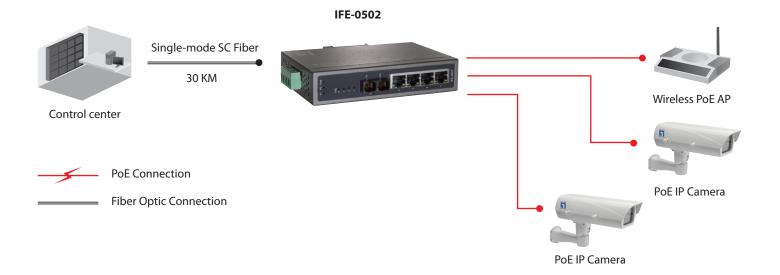
## **Stability Testing**

IEC60068-2-32 (Free fall)

IEC60068-2-27 (Shock)

IEC60068-2-6 (Vibration)

#### **Product Diagram**



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

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

# **Package Content**

## IFE-0502

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