# **C**TCTS

# IPC-3012-PoE++ Industrial Media Converter



**Features** 

- Provide 1 Gigabit RJ-45 Copper Port & 1 SFP Port 100FX or 1000BaseF(SX/LX/LH)
- Compatible with IEEE 802.3af/at PoE+ and up to 60W PoE++
- PoE Setting Auto / Force Power
- Support 9K Jumbo Frames
- 6KV Surge Immunity on RJ-45 Copper Port (K.21\*)
- Dual Power Input (12~57VDC) & Built-in Power Booster
- Relay Output for Fault Alarm Notification (Power, Ports)
- Aluminum Housing
- Operating Temperature -40°C~75°C

\*K.21 is better than IEC 61000-4-5 Level 3 and designed for PoE Application and Outdoor environment

1 Port 100/1000Mbps SFP Dual Rate and 1 Port 10/100/1000Base-T with 60W PoE++ Industrial Media Converter

## **Description**

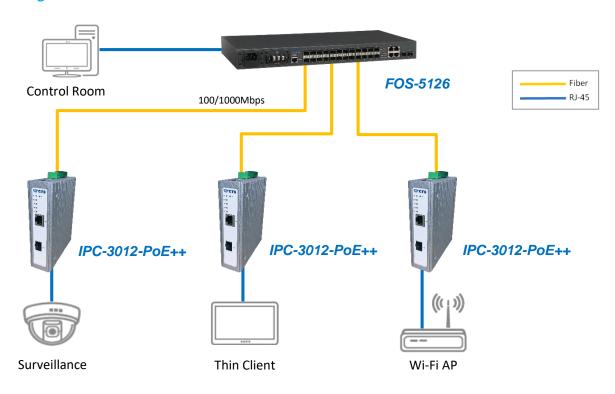
Connection Technology Systems (CTS) IPC-3012-PoE++ media converter is a Gigabit Ethernet 10/100/1000 Base-T with 60W PoE++ to 100/1000Base-X media converter. The IPC-3012-PoE++ media converter converts traditional twisted-pair RJ45 cable into various fiber media including multi-mode, single-mode with SC connectors or bi-directional WDM to fulfill different requirements depending on the deployment.

The IPC-3012-PoE++ media converter is designed for deployment at industrial sites. With DIN-Rail mounting, you can easily mount the industrial PoE Media Converter at your sites. The media converter supports two DC power inputs to provide redundancy and prevent any possible power loss and Relay output to serve as an alarm.

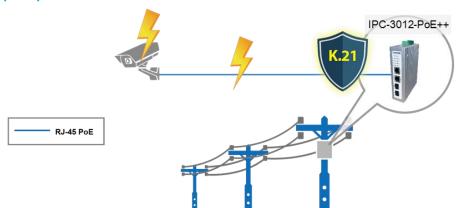
The IPC-3012-PoE++ media converter supports extended working temperature from -40°C to 75°C to withstand against harsh environment for a better performance. It is designed for surveillance network system integrators, who have the needs of implementing fiber optical Ethernet networks over long distance for wide-area surveillance solutions with the demand of wide operating temperature, and are looking for an effortless and robust Gigabit media converter.



# **Application Diagram**



# **6KV Surge Immunity (K.21)**



| Test                       | <b>K.21</b> (EnhancedLevel)                   | IEC 61000-4-5<br>( Level 3 ) | K.21 Advantages                                  |  |  |
|----------------------------|---|------------------------------|--|--|--|
| Temporary<br>Voltage Surge | 6KV 🗸   | <b>2</b> KV                  | Ensures <b>3 times higher</b> voltage            |  |  |
| Temporary<br>Current Surge | 1850A   | <b>4</b> 8A                  | Withstands 39 times higher current               |  |  |
| PoE Standard               | Released PoE testing standard in Dec. of 2016 | N/A                          | Complies with safer <b>PoE testing</b> standards |  |  |

# Innovation to your needs

Converter

IPC-3012-PoE++

# **Specification**

#### **■**Interface

- TP Port
- 1 x 10/100/1000Base-T RJ-45
- F/O Port
- 1 x 100/1000Base-X SFP

#### **■**PoE

- 1 x 60W PoE (RJ-45)
- Max. 60 Watts per port
- Compatible with 802.3af/at

#### **■**Standards

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3z 1000Base-X
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at Power over Ethernet Enhancements

#### ■H/W Specification

- Store and Forward Switching Mechanism
- Auto-Negotiation in Fiber Port
- MDI/MDIX Auto-Crossover Supported
- Support Fault Alarm Notification (Power, Ports)
- Support Auto & Force Mode Configuration
- MAC Address Table : 2K
- Memory Buffer: 128 Bytes
- Relay Output

#### **■LED**

P1, P2, ALM, TP, PoE, SFP

#### **■**Ethernet Features

Jumbo Frames: 9K Bytes

## **■**Other Features

- DIP Switch Configuration
- Installation Type: DIN Rail Mounting
- PoE Configuration: Auto-Mode/ Force Power

#### **■**Environmental Condition

- Operating Temperature: -40° ~ 75°C
- Storage Temperature: -40° ~ 85°C
- Humidity: 5% ~ 90%, non-condensing

### **■**Power Requirement

#### DC Input:

- Terminal Block x 1 with two power inputs
- Input Voltage: 12~57VDC
- Caution: Use 14AWG or better powering wire
- Power Consumption: 64.8W (Max.)

## ■Dimension & Weight

- Size: 36x110x135 mm (WxDxH)
- Weight: 0.62Kg

# **■**EMC/Safety

FCC Class A, CE IEC 61000-4-2/3/4/5/6 ITU-T K.21

#### **Order Information**

## IPC-3012-PoE++

| Model          | Fiber Ports      |      |           |          | TP Ports |                     |                |  |
|----------------|------------------|------|-----------|----------|----------|---------------------|----------------|--|
|                | Speed            | Туре | Connector | Distance | Ports    | Speed               | PoE++<br>Ports | Support Power Source                     |
| IPC-3012-PoE++ | 100/1000<br>Mbps | SFP  | -         | -        | 1        | 10/100/1000<br>Mbps | 1              | Terminal Block x 1 with two power inputs |