

# IPC-3014 Industrial Media Converter



**Features** 

- Provide 2 Gigabit RJ-45 Copper Ports & 2 SFP Ports 100FX or 1000BaseF(SX/LX/LH)
- Compatible with IEEE 802.3af/at PoE+
- PoE Setting Auto / Force Power
- Support 9K Jumbo Frames
- 6KV Surge Immunity on RJ-45 Copper Ports (K.21\*)
- Dual Power Input (12~57VDC) & Built-in Power Booster
- Support 3 Operating Modes Switch mode, Fiber Backup mode and Dual Media Converter mode
- Relay Output for Fault Alarm Notification (Power, Ports)
- Aluminum Housing
- Operating Temperature -40°C~75°C

2 Ports 100/1000Mbps SFP Dual Rate and 2 Ports 10/100/1000Base-T with 802.3af/at PoE+ Industrial Multi-Functional Media Converter

# **Description**

Connection Technology Systems (CTS) IPC-3014 series media converter is a Gigabit Ethernet 10/100/1000 Base-T with 802.3af/at PoE+ to 100/1000Base-X media converter. The IPC-3014 series 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-3014 series 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-3014 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.

The IPC-3014 media converter supports three different operating modes and provides system integrators the flexibility to design their networks under different applications with the same product, thus lowering the complexity of their operation and the inventory pressure.

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

# Innovation to your needs

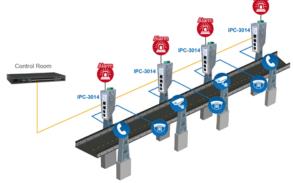
## **Application Diagram**



#### **■** Scenario 1: Bridges/Tunnels

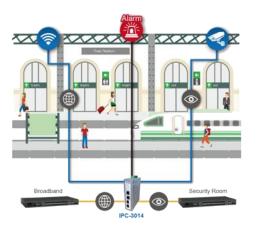
A long-distant area in need of a surveillance system can sometimes cause extra costs during the deployment.

CTS' brand-new industrial PoE converter, IPC-3014, supports **switch mode**, which enables the converters to build a chain network easily and solves the problem.



## Scenario 2 : Public Venues

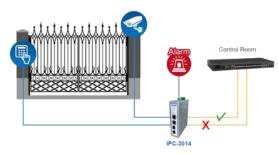
With the uprising trend of mobile devices, more and more public venues provide free Wi-Fi broadband to satisfy their customers. At the same time, the security of surveillance systems cannot be compromised. CTS IPC-3014 supports **dual media converter mode**, which separates the traffic for different purposes (e.g. Public WiFi and Surveillance).

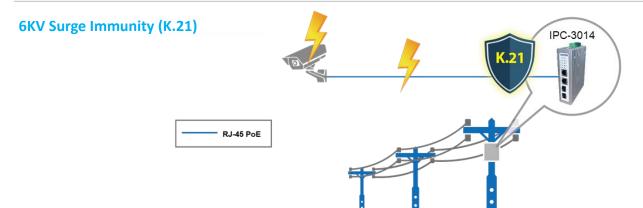


#### **■** Scenario 3 : Highly Secured Places

At highly secured checkpoints, malfunction of the surveillance systems might cause severe damage beyond imagination.

CTS IPC-3014 supports **fiber backup mode**, which enables the system to work smoothly if a fiber cable link is down.





Test K.21 (EnhancedLevel)		IEC 61000-4-5 (Level 3)	K.21 Advantages	
Temporary Voltage Surge	6KV	2KV	Ensures 3 times higher voltage	
Temporary 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

# **Specification**

#### **■**Interface

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

#### **■**PoE

- 2 x IEEE 802.3af/at (RJ-45)
- Max. 30 Watts per port
- 60 Watts PoE Budget

#### **■**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, Mode, TP1, TP2, PoE1, PoE2, SFP1, SFP2

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

#### **■**Power Requirement

DC Input:

- Terminal Block x 1 with two power inputs
- Input Voltage: 12~57VDC
- Power Consumption: 66W

#### ■Dimension & Weight

- Size: 36x110x135 mm (WxDxH)
- Weight: 0.64Kg

#### **■**EMC/Safety

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

# **Order Information**

# IPC-3014

Model	Fiber Ports				TP Ports			
	Speed	Туре	Connector	Distance	Ports	Speed	PoE Ports	Support Power Source
IPC-3014	100/1000 Mbps	SFP	-	-	2	10/100/1000 Mbps	2	Terminal Block x 1 with two power inputs