

WPC-3012 Series Media Converter



Features

- **IEEE802.3at/af PoE/PSE**
Support IEEE802.3at/af PoE feature to feed power to remote devices and facilitate the deployment in the power unreachable application.
- **Link Alarm**
Supports link alarm function to help network administrator rapidly managing and recovering network fault.
- **Power Redundancy over DC input by Terminal Blocks**
Support power redundancy over DC input to keep the healthy network connection without power outage risk for general industrial application.
- **9K Bytes Jumbo Frames**
Support jumbo frame size 9K bytes to ease the network traffic loading and facilitate IPTV service.
- **DIN-Rail/Wall Mounting installation types**
Support both DIN-rail and wall mounting types to facilitate the installation flexibility for general industrial application.
- **Operating Temperature -20°C ~ 60°C**
Device supports extended operating temperature to guarantee the reliability and stability in the critical environmental condition with affordable cost.

Target Applications

- Point-to-point fiber connection for long distance as well as PoE/PSE enabled equipment which requires reliable and stable link under critical environmental condition of general industrial application.

Gigabit Ethernet 10/100/1000Base-TX to 1000Base-FX Media Converter Built-in IEEE802.3at/af PoE/PSE Feature with Extended Operating Temperature

Description

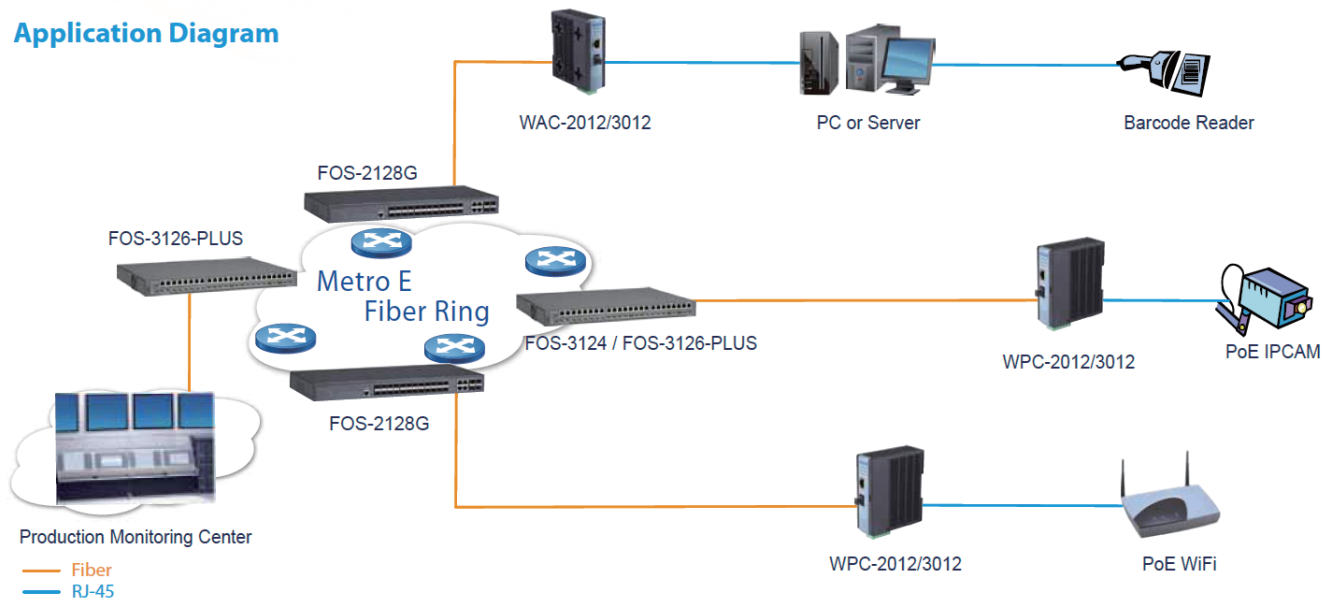
Connection Technology Systems (CTS) WPC-3012 series media converter are the Gigabit Ethernet 10/100/1000 Base-T to 1000Base-X media converter. The WPC-3012 series media converter converts traditional twisted-pair RJ45 cable into various fiber media including multi-mode, single-mode, SC connector, bi-directional WDM, or a SFP slot for pluggable fiber transceiver. The traditional transmission distance of 100m over RJ45 copper can be extended from 550m to 80km over fiber.

WPC-3012 series media converter adopts the brand new ID appearance as well as the well considered designs for the demand of different customer segments. The flexible power options have either DC power or AC/DC power adaptor to fulfill most of practical deployment scenarios. The extended operating temperature of WPC-3012 media converter is from -20 °C to 60 °C which makes user install the equipment under critical environment without reliable and stable concerns. It is especially designed for network operators, metro Ethernet providers, enterprise, SMB customer segment, who have the need of implementing fiber optical Ethernet networks over long distance for FTTH solutions with the demand of wide operating temperature, and are looking for an effortless and robust 1000Mbps media converter.

WPC-3012 series media converter is fully compliant with IEEE 802.3, 802.3u, 802.3ab & 802.3z standards. Besides, it is equipped with some switching features including flow control and store and forward. Additionally, Link Alarm feature enables administrator to monitor the fiber link status in visually and intuitively mechanism.

WPC-3012 series media converter is built in PoE/PSE feature which complies to IEEE802.3at/af standard. With PoE/PSE enabled feature, WPC-3012 can significantly solve the installation obstacle for the user in the power unreachable situation. It can actively feed power to the remotely equipment which can not have the power source available and simply facilitate the user applications be deployed smoothly.

Application Diagram



Specification

Interface

TP Port
10/100/1000Base-T RJ45 x 1
F/O Port
1000Base-X x 1

Standards

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

H/W Specification

Auto-Negotiation in TX Port
MDI/MDIX Auto-Crossover Supported
Support Link Alarm
Support Auto & Force Mode Configuration
1K MAC Address Table
32K Bytes Memory Buffer

LED

PW ADC, PW T1, PW T2, TP Link/ACT,
Speed, FDX, F/O Link/ACT, PWR/Port
Status, PoE

Ethernet Features

Support 9K Bytes Jumbo Frames
Support Flow Control
Store and Forward Switching Mechanism

Other Features

DIP Switch Configuration
Installation Type
Wall Mounting
DIN Rail Mounting

Power Requirement

DC Input:
DC Power Jack x 1
Terminal Block x 2
Input Voltage: 48VDC

Power Consumption
DC48V Input: 34W (Max.)

Environmental Condition

Operating Temperature: -20° ~ 60°C
Storage Temperature: -20° ~ 70°C
Humidity: 5% ~ 90%, non-condensing

Dimension & Weight

Size: 35x93x105 mm (WxDxH)
Weight: 0.4Kg

EMC/Safety

FCC Part 15 Class A, CE

Order Information

WPC-3012

MODEL	FIBER PORT					TP PORT	
	Speed	Fiber Type	Connector	Distance	Ports	Speed	Ports
WPC-3012BTFC	1000Mbps	MM	SC	550M	1	10/100/1000Mbps	1
WPC-3012BTFC (SM-10/20/30/50/80)	1000Mbps	SM	SC	10/20/30/50/80KM	1	10/100/1000Mbps	1
WPC-3012W2A(SM-10/20/40)	1000Mbps	WDM	SC	10/20/40KM	1	10/100/1000Mbps	1
WPC-3012W2B(SM-10/20/40)	1000Mbps	WDM	SC	10/20/40KM	1	10/100/1000Mbps	1
WPC-3012SFP	1000Mbps	SFP	-	-	1	10/100/1000Mbps	1

Power Supply

WAP-POWER-48J90	48V/90W AC to DC Power Adaptor	Working Temperature : 0°C~50°C, 90W
WAP-POWER-48D75/DR-75-48	48V/75W DIN-Rail Power Supply	Working Temperature : -10°C~50°C, 75W 50°C~60°C, output derating 4.0% per degree (45W at 60°C)
SDR-75-48	48V/75W DIN-Rail Power Supply	Working Temperature : -25°C~60°C, 75W 60°C~70°C, output derating 2.5% per degree (56W at 70°C)
WAP-POWER-48D240/SDR-240-48	48V/240W DIN-Rail Power Supply	Working Temperature : -25°C~60°C, 240W 60°C~70°C, output derating 2.5% per degree (180W at 70°C)

SFP-30

MODEL	COPPER PORT					Temperature
	Speed	Type	Connector	Distance		
SFP-30TP	1000Mbps	-	RJ-45	100M		0°C to 70°C

SFP-31

MODEL	FIBER PORT					
	Speed	Type	Connector	Distance	Wavelength	Temperature
SFP-31FC	1000Mbps	MM	LC	550M	850nm	0°C to 70°C
SFP-31FC(SM-10/20/40/50/80 /100/120)	1000Mbps	SM	LC	10/20/40/50/80 /100/120KM	1310nm/1310nm/1310nm/1550nm/1550nm 1550nm/1550nm	0°C to 70°C
SFP-31W2A(SM-10/20/40/80)	1000Mbps	WDM	LC	10/20/40/80KM	TX:1310nm/1310nm/1310nm/1510nm RX:1550nm/1550nm/1550nm/1570nm	0°C to 70°C
SFP-31W2B(SM-10/20/40/80)	1000Mbps	WDM	LC	10/20/40/80KM	TX:1550nm/1550nm/1550nm/1570nm RX:1310nm/1310nm/1310nm/1510nm	0°C to 70°C
SFP-31FC-C11	1000Mbps	CWDM	LC	80KM	1470nm	0°C to 70°C
SFP-31FC-C12	1000Mbps	CWDM	LC	80KM	1490nm	0°C to 70°C
SFP-31FC-C13	1000Mbps	CWDM	LC	80KM	1510nm	0°C to 70°C
SFP-31FC-C14	1000Mbps	CWDM	LC	80KM	1530nm	0°C to 70°C
SFP-31FC-C15	1000Mbps	CWDM	LC	80KM	1550nm	0°C to 70°C
SFP-31FC-C16	1000Mbps	CWDM	LC	80KM	1570nm	0°C to 70°C
SFP-31FC-C17	1000Mbps	CWDM	LC	80KM	1590nm	0°C to 70°C
SFP-31FC-C18	1000Mbps	CWDM	LC	80KM	1610nm	0°C to 70°C