

WPC-2012 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.**

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

Description

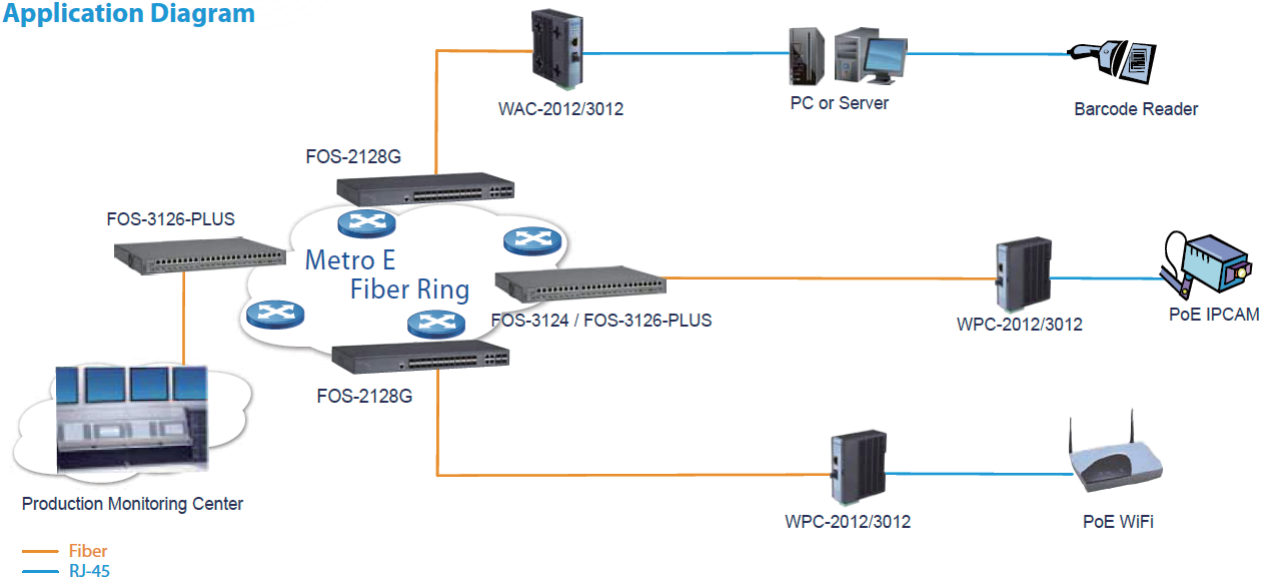
Connection Technology Systems (CTS) WPC-2012 series media converter are the Fast Ethernet 10/100Base-TX to 100Base-FX media converter. The WPC-2012 series media converter converts traditional twisted-pair RJ45 cable into various fiber media including multi-mode, single-mode, SC connector, bi-directional WDM, or a SFP slot for pluggable fiber transceiver. The traditional transmission distance of 100m over RJ45 copper can be extended from 2km to 120km over fiber.

WPC-2012 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-2012 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 FTTX solutions with the demand of wide operating temperature, and are looking for an effortless and robust 1000Mbps media converter.

WPC-2012 series media converter is fully compliant with IEEE 802.3, 802.3u 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-2012 series media converter is built in PoE/PSE feature which complies to IEEE802.3at/af standard. With PoE/PSE enabled feature, WPC-2012 can significantly solve the installation obstacle for the user in the power unreachable situation. It can actively feed power to the remote equipment which can not have the power source available and simply facilitate the user applications be deployed smoothly.

Application Diagram



Specification

Interface

TP Port
10/100Base-TX RJ45 x 1
F/O Port
100Base-FX x 1

Standards

IEEE 802.3 10Base-T
IEEE 802.3u 100Base-TX
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
1K MAC Address Table
48K 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: 12VDC/48VDC

Power Consumption

DC 48V Input: 32W (Max.)

Environmental Condition

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

Dimension & Weight

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

EMC/Safety

FCC Part 15 Class A, CE

Order Information

WPC-2012

MODEL	FIBER PORT					TP PORT	
	Speed	Fiber Type	Connector	Distance	Ports	Speed	Ports
WPC-2012BTFC	100Mbps	MM	SC	2KM	1	10/100Mbps	1
WPC-2012BTFT	100Mbps	MM	ST	2KM	1	10/100Mbps	1
WPC-2012BTFC(SM-30/50/80/100)	100Mbps	SM	SC	30/50/80/100KM	1	10/100Mbps	1
WPC-2012W2A(SM-20/40)	100Mbps	WDM	SC	20/40KM	1	10/100Mbps	1
WPC-2012W2B(SM-20/40)	100Mbps	WDM	SC	20/40KM	1	10/100Mbps	1
WPC-2012SFP	100Mbps	SFP	-	-	1	10/100Mbps	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-20

MODEL	COPPER PORT					Temperature
	Speed	Type	Connector	Distance		
SFP-20TP	100Mbps	-	RJ-45	100M		0°C to 70°C

SFP-21

MODEL	FIBER PORT					
	Speed	Type	Connector	Distance	Wavelength	Temperature
SFP-21FC	100Mbps	MM	LC	2KM	1310nm	0°C to 70°C
SFP-21FC(SM-20/40/80)	100Mbps	SM	LC	20/40/80KM	1310nm/1310nm/1550nm	0°C to 70°C
SFP-21W2A(SM-20/40/80)	100Mbps	WDM	LC	20/40/80KM	TX:1310nm/1310nm/1490nm RX:1510nm/1510nm/1570nm	0°C to 70°C
SFP-21W2B(SM-20/40/80)	100Mbps	WDM	LC	20/40/80KM	TX:1510nm/1510nm/1570nm RX:1310nm/1310nm/1490nm	0°C to 70°C
SFP-21W2A(SM-20)SC	100Mbps	WDM	SC	20KM	TX:1310nm RX:1550nm	0°C to 70°C
SFP-21W2B(SM-20)SC	100Mbps	WDM	SC	20KM	TX:1550nm RX:1310nm	0°C to 70°C
SFP-21FC-C11	100Mbps	CWDM	LC	80KM	1470nm	0°C to 70°C
SFP-21FC-C12	100Mbps	CWDM	LC	80KM	1490nm	0°C to 70°C
SFP-21FC-C13	100Mbps	CWDM	LC	80KM	1510nm	0°C to 70°C
SFP-21FC-C14	100Mbps	CWDM	LC	80KM	1530nm	0°C to 70°C
SFP-21FC-C15	100Mbps	CWDM	LC	80KM	1550nm	0°C to 70°C
SFP-21FC-C16	100Mbps	CWDM	LC	80KM	1570nm	0°C to 70°C
SFP-21FC-C17	100Mbps	CWDM	LC	80KM	1590nm	0°C to 70°C
SFP-21FC-C18	100Mbps	CWDM	LC	80KM	1610nm	0°C to 70°C