# WPC-3112 Series Media Converter

10/100/1000Base-T  to 1000Base-X Gigabit Ethernet Management Media Converter with Built-in IEEE802.3at PoE/PSE Feature and Extended Operating Temperature

Link alarm | Power down trap | PoE | Wide Temperature | Power Redundancy
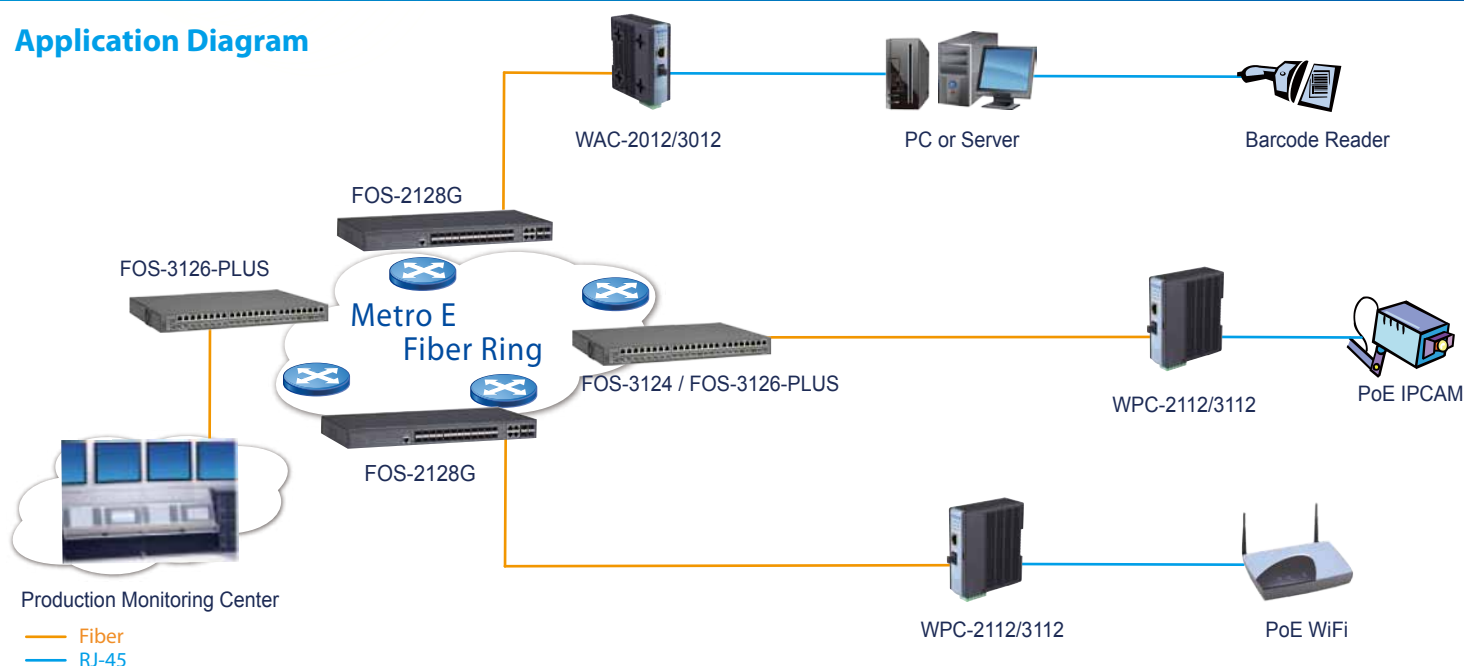
## Description

Connection Technology Systems (CTS) WPC-3112 series media converter are Gigabit Ethernet 10/100/1000Base-T to 1000Base-X media converter which is designed to fulfill the emerging deployment needs of fiber Ethernet network for operators and service providers with SNMP managed functionality.

When WPC-3112 is deployed at customer premises, the media converter can be fully managed by the network equipment in the Central Office site by popular SNMP based network management server (NMS). By leveraging the benefits of CTS unique SNMP based power down trap feature, the WPC-3112 is able to send SNMP based trap message to NMS immediately when detects power failure on converter at customer site. It can significantly reduce truck rolls and save the operational cost (OPEX) for operators or service providers.

The flexible power options that WPC-3112 provides have either DC power or AC/DC power adaptor to fulfill most of practical deployment scenarios. The extended operating temperature of WPC-3112 media converter is from -20℃ to 60℃ which enables users to 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-3112 series media converter is fully compliant with IEEE 802.3, 802.3u, 802.3ab, 802.3z, 802.3at standards. Besides, it is equipped with some switching features including flow control and store and forward. Additionally, Link Alarm feature enables the administrator to monitor the fiber link status in visually and intuitively mechanism.

## Features

- **IEEE 802.3at PoE/PSE**
  Support IEEE 802.3at PoE feature to feed power to remote device 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 Block**
  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.

- **Power Down Trap**
  Built-in CTS unique SNMP power down trap function to rapidly identify network fault due to power outage and reduce truck rolls to save OPEX for operators or service providers.

- **DIN RAIL/Wall Mounting Installation type**
  Support both DIN RAIL and wall mounting type to facilitate the installation flexibility for general industrial application.

- **Operating Temperature -20℃ ~ 60℃**
  Device supports extended operating temperature to guarantee the reliability and stability in the critical environmental condition with affordable cost.

## Target Applications

- SNMP managed Gigabit Ethernet media converter for point-to-point fiber connection which requires reliable and stable link under critical environmental condition of  general industrial application

## Application Diagram



WAC-2012/3012     PC or Server     Barcode Reader

FOS-2128G

FOS-3126-PLUS

Metro E Fiber Ring

FOS-3124 / FOS-3126-PLUS

WPC-2112/3112     PoE IPCAM

FOS-2128G

Production Monitoring Center

WPC-2112/3112     PoE WiFi

— Fiber
— RJ-45

## Specification

### Interface
TP Port
10/100/1000Base-TX RJ45 x 1
F/O Port
1000Base-FX 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 802.3at PoE/PSE

### H/W Specification
Auto-Negotiation in TX Port
MDI/MDIX Auto-Crossover Supported
Support Link Alarm
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
Wire Speed Store and Forward Switching Mechanism

### Other Features
DIP Switch Configuration
Reset to Default Push Button

### 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:
DC 48V Input: 38W (Max.)

### Environmental Condition
Operating Temperature: -20° ~ 60℃
Storage Temperature: -20° ~ 70℃
Humidity: 5% ~ 90%, non-condensing

### Dimension & Weight
Size: 105x93x35 mm (WxDxH)
Shipping Weight: 295g

### EMC/Safety
FCC Part 15 Class A, CE
* For further reports, please contact us for update

## Order Information

| MODEL | FIBER PORT | | | | | TP PORT | |
|---|---|---|---|---|---|---|---|
| | Speed | Fiber Type | Connector | Distance | Ports | Speed | Ports |
| WPC-3112BTFC | 1000 | MM | SC | 550KM | 1 | 10/100/1000 | 1 |
| WPC-3112BTFC(SM -10/20/30/50/80) | 1000 | SM | SC | 10/20/30/50/80KM | 1 | 10/100/1000 | 1 |
| WPC-3112W2A(SM -10/20/40) | 1000 | WDM | SC | 10/20/40KM | 1 | 10/100/1000 | 1 |
| WPC-3112W2B(SM -10/20/40) | 1000 | WDM | SC | 10/20/40KM | 1 | 10/100/1000 | 1 |
| WPC-3112SFP | 1000 | SFP | - | - | 1 | 10/100/1000 | 1 |

| OPTIONAL POWER ADAPTOR ACCESSORY FOR WPC SERIES PRODUCTS | | |
|---|---|---|
| WAP-PW-48J90 | 48V/90W AC to DC POWER ADAPTOR FOR WAC/WPC/WAS SERIES PRODUCTS | US/UK/AU/EU Standard Working TEMP. range:0°~50℃ |
| WAP-PW-48D75 | 48V/75W DIN RAIL POWER SUPPLY FOR WAC/WPC/WAS SERIES PRODUCTS | Working TEMP. range:0°~50℃ |
| WAP-PW-48D240 | 48V/240W DIN RAIL POWER SUPPLY FOR WAC/WPC/WAS/WPS SERIES PRODUCTS | Working TEMP. range:-20°~60℃ |