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

**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 DC Jack and 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.

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

- **Operating Temperature -20°C ~ 60°C**
  Support extended operating temperature to guarantee the reliability and stability under the critical environmental condition with affordable cost.

**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℃ to 60℃ 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 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.

**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.**
### Application Diagram

- **Fiber Ring:** FOS-3124 / FOS-3126-PLUS
- **TP Port:** WAC-2012/3012
- **Fiber:** WPC-2012/3012
- **RJ-45:** WPC-2012/3012

### 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 802.3at PoE/PSE

#### H/W Specification
- Auto-Negotiation in TX Port
- MDI/MDIX Auto-Crossover Supported
- Support Link Alarm
- 1K MAC Address Table

#### 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: 105x93x35 mm (WxDxH)
- Shipping Weight: 0.42Kg

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

### Order Information

<table>
<thead>
<tr>
<th>MODEL</th>
<th>FIBER PORT</th>
<th>TP PORT</th>
<th>Power Accessory Type</th>
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<tbody>
<tr>
<td>WPC-2012BTFC</td>
<td>100 MM SC 2KM</td>
<td>1 10/100 1</td>
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<tr>
<td>WPC-2012BFT</td>
<td>100 MM ST 2KM</td>
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<tr>
<td>WPC-2012SFP</td>
<td>100 SFP -</td>
<td>1 10/100 1</td>
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</table>

### OPTIONAL POWER ADAPTOR ACCESORY FOR WPC SERIES PRODUCTS

- **WAP-POWER-48J90** 48V/90W AC to DC POWER ADAPTOR FOR WAC/WPC/WAS SERIES PRODUCTS
- **WAP-POWER-48D75** 48V/75W DIN RAIL POWER SUPPLY FOR WAC/WPC/WAS SERIES PRODUCTS
- **WAP-POWER-48D240** 48V/240W DIN RAIL POWER SUPPLY FOR WAC/WPC/WAS/WPS SERIES PRODUCTS

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