



## HMC-3012

1 x 10/100/1000Base-T RJ-45 +

1 x 100/1000Base-X Fiber Port  
for SC Connector

Gigabit Ethernet Fiber Media  
Converter

### Description

Connection Technology System (CTS) HMC-3012 media converter is the Gigabit Ethernet Fiber 10/100/1000Base-T to 100/1000Base-X media converter. The HMC-3012 media converter converts traditional twisted-pair RJ-45 cable into WDM SC single-mode fiber media, extending transmission distance up to 10km in the deployment of FTTX point-to-point solutions.

The effortless, minimalistic design of HMC-3012 is self-explanatory. A feature improves on a traditional standalone media converter, of which the appearance usually does not blend well into the overall design of customers' premises.

HMC-3012 media converter is fully compliant with IEEE 802.3, 802.3u, 802.3ab, and 802.3z standards, supporting multiple handy functions including store and forward switching mechanism, auto-negotiation for the TP port, MDI/MDIX auto-crossover for the TP port, and advanced Ethernet-Follow-Fiber method. On the top panel is a set of diagnostic LED indicators, which allows real-time monitoring of the media converter and therefore enables straightforward operation and installation.

Just about the size of your palm, HMC-3012 is an ideal device for the cost-effective deployment of fiber optic connectivity when the required transmission distance cannot be met between two network devices.

- **Gigabit Dual Rate Fiber With Auto-Sensing**

Automatically adjust the link speed between the built-in 100Base-FX and 1000Base-X.

- **9K Bytes Jumbo Frame Size**

Support Jumbo Frame size 9K bytes to ease the network traffic loading and facilitate IPTV service.

- **Plug & Play**

Eliminate the need for complicated installation with fast-deployment FTTX point-to-point design.

- **Advanced Ethernet-Follow-Fiber Method**

The link speed and status of the Ethernet copper port can be adjusted to the fiber optic counterpart.

- **Low-Profile Design**

Just about the size and look of a wall power socket, HMC-3012 nicely blends into any design of customers' premises.

### **Target Applications**

- **FTTX Point-to-Point Implementations.**

## ■ Interface

- TP Port:  
1 x 10/100/1000Base-T RJ-45
- F/O Port:  
1 x 100/1000Base-X  
(TX: 1310 / RX: 1550nm with SC connector)

## ■ Standards

- IEEE 802.3 10Base-T
- IEEE 802.3u 100Base-TX/FX
- IEEE 802.3ab 1000Base-T
- IEEE 802.3z 1000Base-X

## ■ Forward/Filter Rate

- 10M: 14,880/14,880pps
- 100M: 148,800/148,800pps
- 1000M: 1,488,000/1,488,000pps

## ■ H/W Specification

- Non-Blocking Switching Fabric: 4Gbps
- Store and Forward Switching Mechanism
- Auto-Crossover for MDI/MDIX for TP Port
- Auto-Negotiation for TP Port
- MAC Address Table: 2K
- 9K Bytes Jumbo Frame
- DIP Switch:
  - Pin 1: F/O Speed Auto-Sensing
  - Pin 2: F/O 1G Mode
  - Pin 3: Ethernet Follow Fiber Link Status
  - Pin 4: Ethernet Follow Fiber Link Speed

## ■ LED

- Power, Status, Fiber, Ethernet

## ■ Power Requirement

- Power Adaptor  
AC Input: 100VAC ~ 240VAC  
Frequency Range: 50 ~ 60Hz  
DC Output: 12VDC, 1A
- Power Consumption (Max.): 2.04W

## ■ Environmental Condition

- Operation: 0°C ~ 45°C
- Storage Temperature: -20°C ~ 60°C
- Humidity: 5% ~ 90%, Non-Condensing

## ■ Dimension & Weight

- Size: 88 x 88 x 27mm (W x D x H)
- Weight: 105g

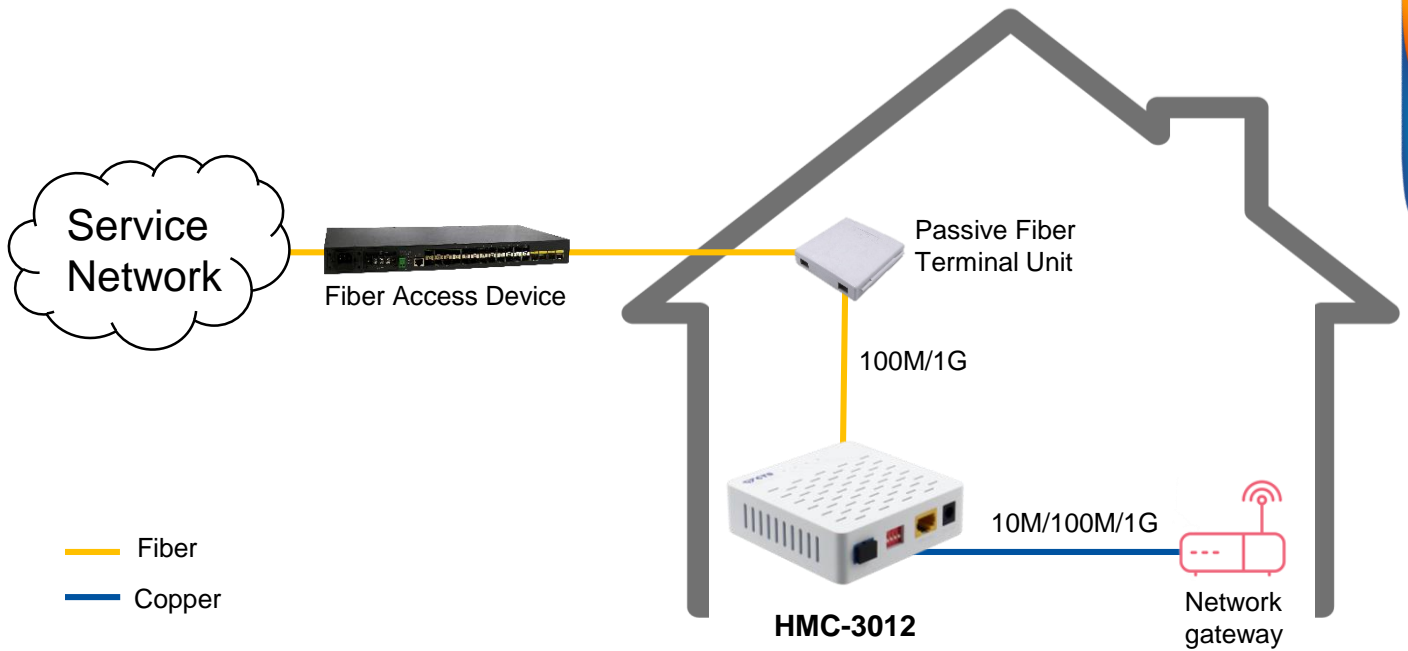
## ■ EMC/Safety

- FCC Class A, CE

\* Under development function

\*\* Future feature

# Application Diagram



## Order Information

### HMC-3012

| Model              | Fiber Port   |      |           |          |      | TP Port      |      |
|--------------------|--------------|------|-----------|----------|------|--------------|------|
|                    | Speed (Mbps) | Type | Connector | Distance | Port | Speed (Mbps) | Port |
| HMC-3012W2A(SM-10) | 100/1000     | WDM  | SC        | 10KM     | 1    | 10/100/1000  | 1    |