

## OPT-2202 Series Media Converter

1000Base-Fx to 2\*10/100/1000Base-Tx  
RoHS Compliant



### >>Description

The OPT-2202 series comply with IEEE 802.3/ab Gigabit Ethernet standard. It supports two types of media for network connection such as two 10/100/1000Base-T to 1000Base SX/LX and connects these two types of segments to operate smoothly OPT-2202 series can be used in 16 slot chassis as plug in module OPT-2202 series Fiber Media Converter transforms 1000Base-T (Copper Gigabit) media to 1000Base-SX/LX (Fiber Gigabit) media and vice versa. The 1000Base-T port supports full-duplex Gigabit connection at wire speed with RJ45 connector. The fiber Gigabit connection supports shortwave (SX) or long wave (LX) laser optic with multi-mode or single-mode SC type connector.

This converter will give your Copper Gigabit connection the ability to interface with fiber connection over a distance up to 80 km! 10/100/1000 means, that media converter that converts the electrical signal of a 10/100/1000 Ethernet signal from copper to fiber. This solution will offer a low-cost integration option for network managers who want to migrate from 10/100 networks to Gigabit Ethernet. Gigabit only switches can now be connected to 10/100 networks without the need to upgrade the 10/100 side, allowing network managers to add new equipment gradually

### >>Main Features

- Complies with IEEE 802.3, IEEE 802.3u, IEEE802.3z, IEEE802.3ab, IEEE 802.3x auto-negotiation
- Works at 10Mbps or 100Mbps, full or half-duplex mode, or 1000Mbps full-duplex mode
- Extends distances ranging from 550m(multi-mode fiber) to 120km(single-mode fiber)
- Supports auto MDI/MDIX function
- Status LED for easy monitoring of device status
- External power supply
- Supports independent LFP function
- FCC Class A & CE approved

## >> Specifications

### Interface

- 2 x Ethernet port (RJ45) 10/100/1000Base-Tx
- 1 x Optical port (1x9 or SFP) 1000Base-Fx

### Optical Port

- Available for 1310nm and 1550nm Single mode, and 850nm Multi mode;
- Transfer Distance: up to 120km;
- Connectors: SC, ST, FC, SFP optional
- Fiber core: 9/125µm on single mode fiber, 50/125µm and 62.5/125µm on multi-mode fiber

### Ethernet Port

- Cable: Cat 5/5e/6 UTP cable
- Available speed: force 10Mbps, force 100Mbps, force 1000Mbps and auto-detective 10/100/1000Mbps Full-Duplex and Half-Duplex auto-negotiation
- Connectors: RJ-45 Connector; MDI/MDI-X connection auto-sensing

### Standard

- IEEE802.3 (10Base-T)
- IEEE802.3u (100Base-TX/FX)

- IEEE802.3ab (1000Base-T)
- IEEE802.3z (1000Base-SX/LX/CX/T)
- IEEE802.3x (Flow control)

### LED Indicators

- Power Status, Speed Status, FX Link/Act, TX Link/Act

### Power Requirement

- Input: 5V DC

### Physical Characteristics

- Housing: Metal enclosure
- Dimensions: 94 x 70 x 26mm (Excluding the connector)
- Weight: 0.28kg

### Environmental Limits

- Operating Temperature: 0°C to 50°C
- Storage Temperature: -20°C to 70°C
- Operating Humidity: 10% to 90% RH
- Storage Humidity: 5% to 90% RH

### Agency Approvals

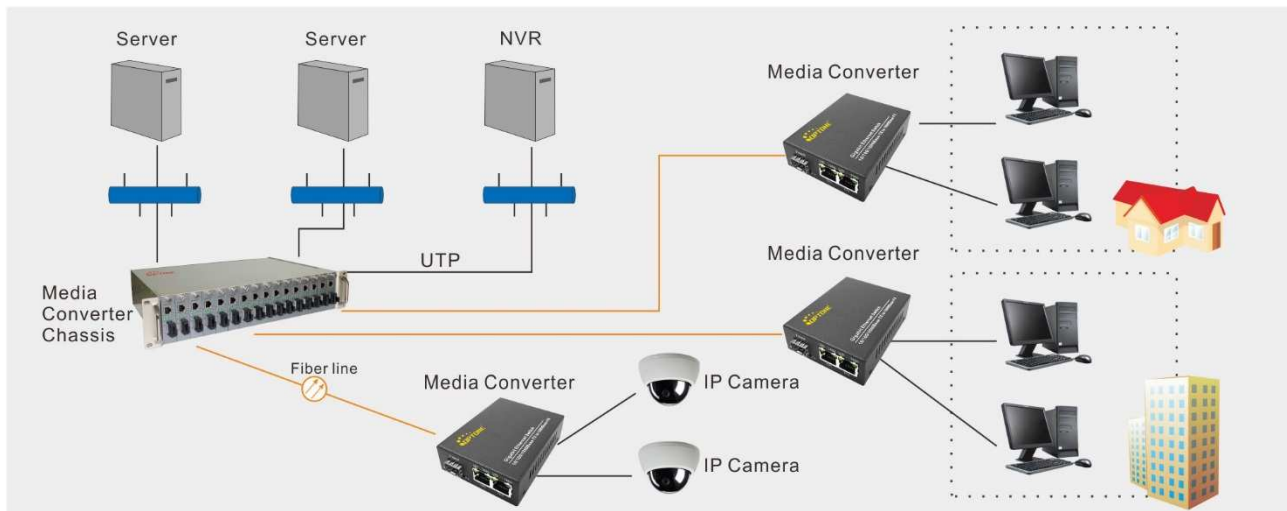
- FCC Part 15 of Class A & CE approved

### Warranty

- 3 years

## >> Applications

The following illustrates typical applications for the OPT-2202 series. The actual distances will depend on several factors including the quality of cables used and the terminal equipment employed.





## >>Ordering Information

### **Double Fiber**

OPT-2202M05 1000Base-Fx to 2\*10/100/1000Base-Tx, Multi mode, 0.5Km, SC/ST/FC optional

OPT-2202S20 1000Base-Fx to 2\*10/100/1000Base-Tx, Single mode, 20Km, SC/ST/FC optional

### **Single Fiber**

OPT-2202W20 1000Base-Fx to 2\*10/100/1000Base-Tx, Bi-Directional, 20Km, SC/ST/FC optional

### **SFP Port**

OPT-2202A GE SFP port to 2\*10/100/1000Base-Tx

### **Optional SFP (Only OPT-2202A)**

<i>Model</i>	<i>Rate</i>	<i>Wavelength</i>	<i>Distance</i>	<i>Connector</i>
SFP-SX-MM-0205	1.25Gbps	850nm	0.5km	Duplex LC
SFP-LX-SM-0220	1.25Gbps	1310nm	20km	Duplex LC
SFP-LX-SM-0240	1.25Gbps	1310nm	40km	Duplex LC
SFP-ZX-SM-0280	1.25Gbps	1550nm	80km	Duplex LC

## >>Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by OPTONE before they become applicable to any particular order or contract. In accordance with the OPTONE policy of continuous improvement specifications may change without notice.

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