

## OPT-1102 Series Media Converter

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



### >>Description

The OPT-1102 series is among Optone's answers to expanding existing Fast Ethernet networks. The easy implementation and expansion of 100Base-TX/FX networks can be further assured with this converter.

The converter is completely transparent when connected so the network performs exactly the way it did before only now, it allows the co-existence of both copper and fiber mediums. Added flexibility is available with ST, SC, FC and WDM Simplex SC connectors. Extra distances are possible with the single mode version delivering up to 120km connectivity per transmitted segment.

The OPT-1102 allows the installation of fiber cabling anywhere within a Fast Ethernet network topology by directly connecting to existing devices. Its compact modular design facilitates deployment in a narrow desktop location to save space.

### >>Main Features

- Complies with IEEE 802.3, IEEE 802.3u, IEEE 802.3x auto-negotiation
- Optional 19" System Chassis (OPT-R14) holds up to 14 Media Converters
- Extends distances ranging from 2km (multi-mode fiber) to 120km (single mode fiber)
- Auto-negotiation support on RJ-45 port
- Auto-negotiation of duplex(HDX/FDX) on RJ-45 port
- Auto MDI/MDI-X support on RJ-45 port
- External power supply
- Supports packet length up to 2k
- FCC Class A & CE approved

## >> Specifications

### Interface

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

### Optical Port

- Available for 1310nm and 1550nm Single mode, 1310nm Multi mode;
- Transfer Distance: up to 120km;
- Connectors: SC, ST, FC 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 and auto-detective 10/100Mbps 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)
- IEEE802.3x (Flow control)

### LED Indicators

- Power 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: 0.25kg

### 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

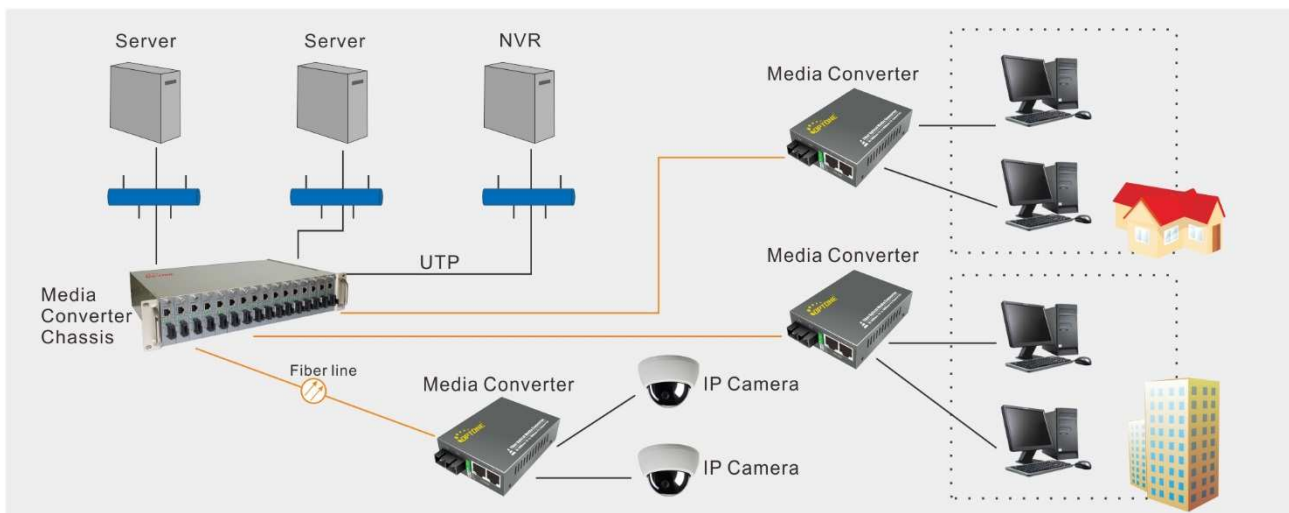
- FCC Part 15 of Class A & CE approved

### Warranty

- 3 years

## >> Applications

The following illustrates typical applications for the OPT-1102 series. The actual distances will depend on several factors including the quality of cables used and the terminal equipment employed.





## >>Ordering Information

### **Double Fiber Media Converter**

|              |  |
|--------------|--|
| OPT-1102     | 100Base-Fx to 2*10/100Base-Tx, Multi mode, 2Km, SC/ST/FC   |
| OPT-1102S25  | 100Base-Fx to 2*10/100Base-Tx, Single mode, 25Km, SC/ST/FC |
| OPT-1102S40  | 100Base-Fx to 2*10/100Base-Tx, Single mode, 40Km, SC/ST/FC |
| OPT-1102S60  | 100Base-Fx to 2*10/100Base-Tx, Single mode, 60Km, SC       |
| OPT-1102S80  | 100Base-Fx to 2*10/100Base-Tx, Single mode, 80Km, SC       |
| OPT-1102S100 | 100Base-Fx to 2*10/100Base-Tx, Single mode, 100Km, SC      |
| OPT-1102S120 | 100Base-Fx to 2*10/100Base-Tx, Single mode, 120Km, SC      |

### **WDM Fiber Media Converter**

|                |   |
|----------------|---|
| OPT-1102S25A/B | 100Base-Fx to 2*10/100Base-Tx, Bi-Directional, 25Km, SC/ST/FC |
| OPT-1102S40A/B | 100Base-Fx to 2*10/100Base-Tx, Bi-Directional, 40Km, SC/ST/FC |
| OPT-1102S60A/B | 100Base-Fx to 2*10/100Base-Tx, Bi-Directional, 60Km, SC       |
| OPT-1102S80A/B | 100Base-Fx to 2*10/100Base-Tx, Bi-Directional, 80Km, SC       |

## >>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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