



GVT-2002 Version: 1

## 10/100/1000BASE-T to 1000BASE-SX SMF SC Converter, 20KM

The GVT-2002 SMF SC media converter is able to convert network signals between copper and fiber-optic based networks. The converter provides a 10/100/1000Base-T RJ-45 port, supports full duplex and half duplex switch connectivity and 10Base-T, 100Base-TX and 1000Base-T auto-sensing. Used in single-mode with fibre-optic cabling, this can extend a network range up to 20KM.

The device features built-in Dip switches for easy converter configuration, which function on the Smart LFP (Link Fault Pass-through), allowing the converter to monitor both the fiber and copper ports for signal loss, as well as cut through and smart pass through mode.

The GVT-2002 is able to operate in temperatures from -10° up to 55° Celsius. The converter can be used as a standalone unit or as a slide-in module to the CHV-2000 19" converter rack, which can accommodate up to 14 units for use in a central wiring closet.



1. 10/100/1000Mbps Fiber Port
2. LED Indicators
3. 10/100/1000Mbps RJ-45 Port



4. DC Power Jack
5. Dip Switch

### Key Features

- Transfers data from 10/100/1000Base-T copper to fiber interfaces
- 1000Base-SX single-mode fiber for the link up to 20KM
- 9K jumbo frames to increase data transfer rates
- Built-in LFP (Link Fault Pass-through) Technology
- IEEE 802.3x Flow Control protects against lost packets for reliable data transmission
- Dip switches for customized configuration
- Supports low-time lag transmission
- Supports the transmission of extra-long packets up to 1.6KB



- -10°C ~ 55°C operating temperature range

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## Works Well With



**CVH-2000**  
14-Slot Media Converter Chassis



**GVT-2000**  
10/100/1000BASE-T to 1000BASE-X SFP Converter

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## Specifications

### System Specifications

#### Standards & Protocols:

IEEE 802.3 10-BASE-T, Ethernet  
IEEE 802.3u 100-BASE-TX, Fast Ethernet  
IEEE 802.3ab 1000BASE-T, Gigabit Ethernet  
IEEE 802.3x Flow Control (full-duplex flow control)  
IEEE802.3z 1000Base-SX/LX,

#### Connectors and Cabling:

Fiber Duplex SC;RJ-45 Port CAT-5/5e Twisted Pair  
cable Auto MDI/MDI-X (Max to 100m) and Auto-Negotiation

#### Wavelength(nm):

1310nm

#### Indicator:

PWR,TX (FDX, 100, 1000, Link/Act), FX Link/Act

#### Transmission Method:

Store and forward (Default)

#### Power:

DC 5V/2A

### Features

#### General:

DIP Switch 1: LFP function  
DIP Switch 2 and 3 performance 4 types work mode  
DIP Switch 2 and 3 is OFF = Store and forward  
DIP Switch 2 is OFF, 3 is ON = Cut through mode  
DIP Switch 2 is ON, 3 is OFF = Smart pass through  
DIP Switch 2 and 3 is ON = Pass through mode

### Performance

#### Operating Distance:

20KM

### Environment

Temperature (°C):  
 Storage: -40 ~75 °C  
 Operating: -10 ~ 55 °C  
 Humidity (Non-condensing):  
 5 ~ 90 %

**Physical Specifications**

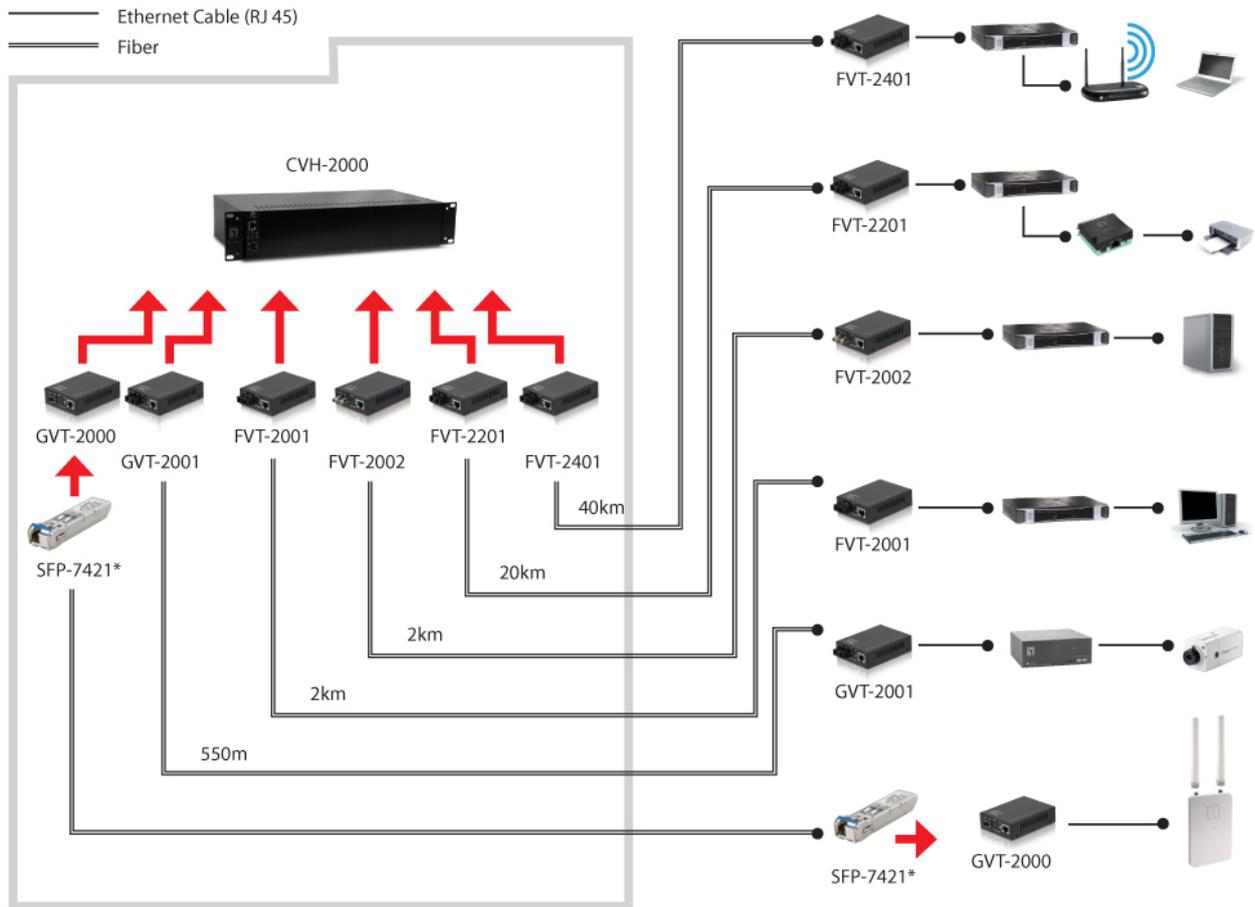
Dimensions (W x D x H mm):  
 71 x 94 x 26 mm  
 Weight (g):  
 420 g

**Others**

Approval and Compliance:  
 CE, FCC  
 Deployment:  
 Desk, chassis mounted

**Diagram**

**Dimension Diagram**



\*In above example diagram, converter modules at local and remote ends should be paired for proper connectivity, and the distance mainly depends on cable and transceiver selection accordingly.

## Order Information

GVT-2002

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## Package Contents

GVT-2002  
Power Adapter  
Quick Installation Guide

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## Optional Accessory



**CVH-2000**  
14-Slot Media Converter Chassis

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