



GVT-2002 Version: 1

# RJ45 to SC Gigabit Media Converter, Single-Mode Fiber, 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.

## **Key Features**

- Single-mode fiber with SC connector for transmission of up to 20km
- Transfers data from 10/100/1000Base-T copper to fiber interfaces
- 9K jumbo frames to increase data transfer rates
- Built-in LFP (Link Fault Pass-through) (LLCF/LLR) 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 to 55°C operating temperature range

## **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,

#### Port

Fiber Duplex SC (20km);RJ-45 Port CAT-5/5e Twisted Pair cable Auto MDI/MDI-X (Max to 100m) and Auto-Negotiation

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#### Indicator:

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

#### Wavelength (nm):

1310nm

#### Transmission Method:

Store and forward (Default)

#### Power Input:

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**

## Operating Temperature (°C):

-10 ~ 55 °C

## Operating Humidity (Non-condensing):

5 ~ 90 %

## Storage Temperature (°C):

-40 ~75 °C

#### Installation:

Desk, chassis mounted

## **Physical Specifications**

#### Dimensions (W x D x H mm):

71 x 94 x 26 mm

#### Weight (g):

360g

## **Approval and Compliance**

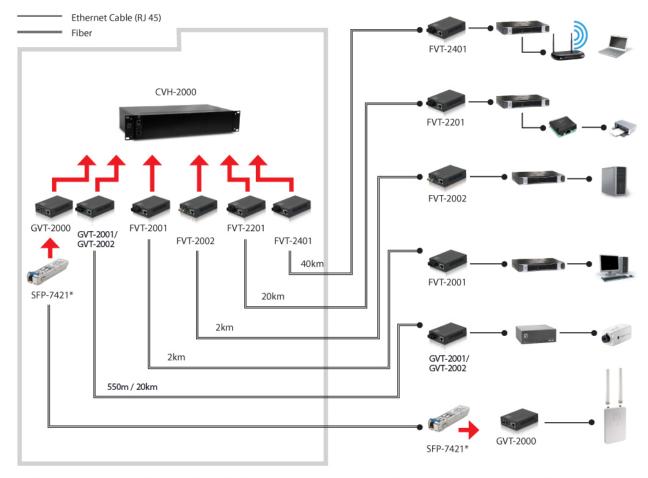
## EMI/EMS:

CE, FCC

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## **Diagram**

#### **Dimension Diagram**



<sup>\*</sup>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

## **Package Contents**

GVT-2002 Power Adapter Quick Installation Guide

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