



GVT-2012 Version: 1

## RJ45 to SFP Gigabit Media Converter, PoE PSE

The LevelOne GVT-2012 is a Single-Port, End-Span IEEE 802.3at High Power over Ethernet converter. Equipped with a Gigabit SFP port for universal Fiber connectivity. It is designed specifically to satisfy the growing demand for higher power required network equipment such as PTZ (Pan, Tilt & Zoom) network cameras, PTZ speed dome, color touch-screen VoIP telephones, multi-channel (IEEE 802.11a / b / g / n) wireless LAN access points and other network devices that demand a higher power to function normally. The GVT-2012 is a High Power over Ethernet converter and an ideal solution to delivering data and power to network devices directly via the RJ45 Port interface without the need for installing extra power outlets and electrical cabling.

### Key Features

- Transfers data from 10/100/1000Base-T copper to fiber interfaces
- IEEE 802.3af/at PoE PSE with 30W power budget
- 9K jumbo frames to increase data transfer rates
- 1000Mbps full-duplex, 10/100Mbps full/half-duplex, auto-negotiation, auto-MDI/MDIX
- IEEE 802.3x Flow Control protects against lost packets for reliable data transmission
- IEEE 802.3z Gigabit Ethernet compliant

### Specifications

#### System Specifications

##### Standards & Protocols:

IEEE802.3 10Base-T Ethernet,  
 IEEE802.3u 100Base-TX Fast Ethernet,  
 IEEE802.3ab 1000Base-T ,  
 IEEE802.3z 1000Base-SX/LX Gigabit Ethernet,  
 IEEE 802.3x flow control,  
 IEEE 802.3at POE+ ,  
 IEEE 802.3af POE

##### Port:

1X SFP Slot  
 1 X RJ45 port(PoE PSE)

##### Indicator:

PWR (power supply),  
 FX LINK (optical link action)  
 TP 1000 (TP cable rate1000M),  
 TP 100 (TP cable rate 100M)  
 TP LINK/ACT (TP cable packet forwarding action),  
 FDX (TP full duplex operation)



**Wavelength (nm):**  
depend on fiber transeiver

**Transmission Method:**  
Store and forward

**Power Input:**  
External: DC48~55V/1A input  
Power over Ethernet (IEEE802.3af) 48 VDC

## Features

### General:

1. Complies with IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3ab 1000Base-T, IEEE 802.3z 1000Base-SX/LX, IEEE 802.3x flow control, IEEE 802.3at POE+, IEEE 802.3af POE
2. Media conversion between 10/100/1000Base-T and 1000Base-SX/LX
3. 10/100/1000M media converter with SFP slot or SC fiber transeiver
4. Supporting auto-sensing full-duplex and half-duplex operation
5. Supporting auto-sensation of MDI/MDI-X, facilitating system commissioning and installation
6. Support jumbo frame up to 9K
7. Store-and-Forward mechanism
8. Support being powered by PoE via UTP cable and AC/DC adaptor

## Performance

**Operating Distance:**  
depend on fiber transeiver

**Jumbo Frame (K):**  
9K

## Environment

**Operating Temperature (°C):**  
-10~60 with operating  
-40~85 with storage

**Operating Humidity (Non-condensing):**  
5%~90%

**Installation:**  
Desk, Wall,  
Chassis mounted

## Physical Specifications

**Dimensions (W x D x H mm):**  
94 x 70 x 26mm

**Weight (g):**  
200g

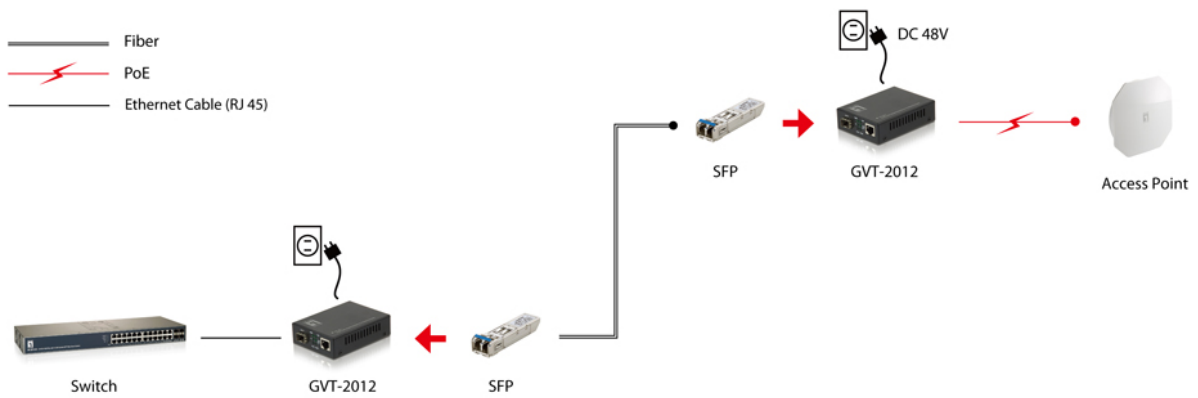
## Reliability

**MTBF:**  
30000 hours

## Approval and Compliance

**EMI/EMS:**  
CE, RoHS

## Diagram



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## Order Information

GVT-2012

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## Package Contents

GVT-2012  
Power Adapter  
Power Cord  
Quick Installation Guide

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