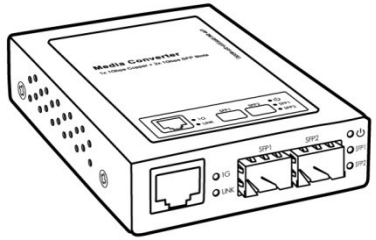
# ROLINE Gigabit Converter, RJ45-Mini GBIC

21.13.1074

## Quick Installation Guide



## Technical Specifications

| | |
|---|---|
| **Standards** | IEEE 802.3 10BaseT<br>IEEE 802.3u 100BaseTX<br>IEEE 802.3ab 1000BaseT<br>IEEE 802.3z 1000BaseSX/LX<br>IEEE 802.3x Flow Control |
| **Features** | Number of Ports:<br>1x10/100/1000BaseT(X) TP port<br>2x1000BaseSX/LX SFP open slots |
| **Data Transfer Rate** | 20/200/2000Mbps/Full-Duplex |
| **Transmission Media** | TP: 10/100/1000BaseT(X) Cat. 5, 5E, 6 UTP/STP, up to 100m<br>1000BaseSX:<br>50/125µm Multi Mode Fiber optic cable, up to 220m<br>62.5/125µm Multi Mode Fiber optic cable, up to 550m<br>1000BaseLX:<br>9/125µm Single Mode Fiber optic cable |

## Introduction

This Gigabit Ethernet Media Converter is able to bridge a 10/100/1000BaseT(X) signal to a 1000BaseSX/LX signal. It extends the distance between two Gigabit Ethernet twisted-pair devices via a fiber cable transparently with no performance degradation.
This Media Converter is based on a switching hub design. It supports Auto-Negotiation and Flow Control on the twisted-pair port. There are two SFP slots for multi-mode or single-mode SFP modules.

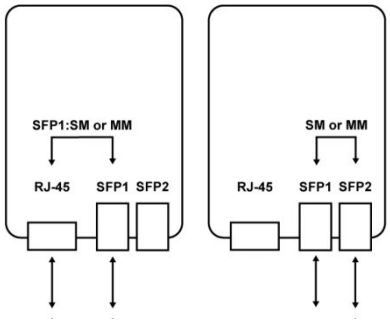
## Key Features

**Compliant with IEEE 802.3 10BaseT, IEEE 802.3u 100BaseTX, IEEE 802.3ab 1000BaseT and IEEE 802.3z 1000BaseSX/LX**

- 1x 10/100/1000BaseT(X) Ethernet TP Port and 2x 1000BaseSX/LX Gigabit Ethernet Fiber Port
- 2x 1000BaseSX/LX Fiber Port can support either Multi or Single Mode
- TP Port can support Half/Full-Duplex, Auto-MDI/MDI-X and Auto-Negotiation

19” Converter Chassis for up to 16 slots with redundant power supply for optional expansion use.

## Application




Two Operating Modes:

- RJ-45 to SFP
- SFP to SFP
- SFP can be SM or MM

## Installation

DC Input & External Power Adapter
External Power Adapter specification:
The device DC Input is +5VDC 2A.

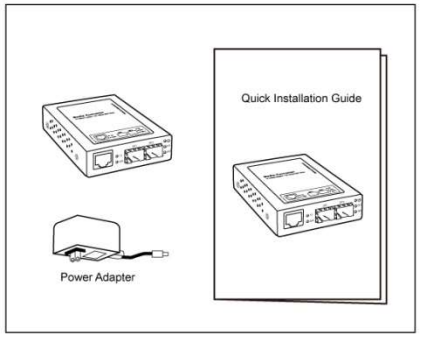
**The TP Port**
The device TP port supports Auto-MDIX, Auto-Negotiation and Flow Control. It can work in the 10BaseT, 100BaseTX or 1000SX/LX environment and the cable length is up to 100 meters for Cat5, Cat5e or Cat6 shielded/unshielded twisted-pair cable.

**2 x SFP slots**
There are two SFP slots for SFP modules. Both multi-mode and single-mode are supported.

## Package Contents

Before you start to install this coverter, please verify if your package contains the following items:

- One Media Converter
- One Power Adapter
- One Quick Installation Guide



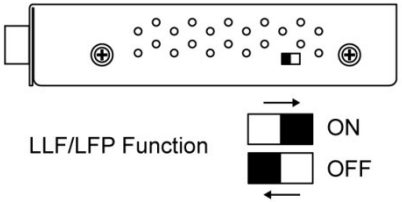

Note: If any of these items is missing or damaged, please contact your local supplier for replacement.

## LEDs

**LED Indicators of Media Converter**

| LED | Status | Operation |
|---|---|---|
| Power (Amber) | On | Power is on |
| Copper 1G (Green) | On/Off | 1Gbps/<br>Under 1Gbps |
| Copper Link/Act. (Green) | On/Flashing | Link/Transmitting |
| SFP1 Link/Act. (Green) | On/Flashing | Link/Transmitting |
| SFP2 Link/Act. (Green) | On/Flashing | Link/Transmitting |

## LLF/LFP Function



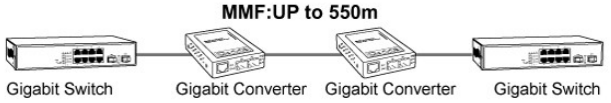

Link Loss Forwarding (LLF) / Link Fault Pass Through (LFP) is a function to pass the message if the optical fiber link fails. With the optical fiber link fault pass through, system administrators are able to notice the link failure within a short period of time, minimizing the loss caused by this problem.

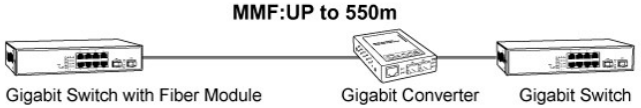
**Notice:** SFP to SFP mode does not support LFP function, and the DIP switch must be turned off.

| | |
|---|---|
| **LED Indicators** | Per Port:<br>(TX): Link, TX<br>(FX): Link, RX<br>Per Unit: Power |
| **Power Requirement** | 5-12Vdc, DC Jack (Φ2.5mm) |
| **Power Consumption** | 3 Watts (Max) |
| **Dimensions** | 74 x 22 x 102mm (W x H x D) |
| **Weight** | 201g |
| **Operating Temperature** | 0 to 50˚C |
| **Storage Temperature** | -20 to 80˚C |
| **Humidity** | Max. 90% RH (Non-condensing) |

## Connections

### Multi-Mode Fiber (MMF) application




### Single-Mode Fiber application