# TH-4G0102

Industrial Media Converter 1xGigabit SFP, 2x10/100/1000Base-T

## Overview

TH-4G0102 Industrial Ethernet Media Converter uses store-forward architecture, fan-less and energy-saving design. The advantage of product is small, convenient and easy to maintain. It applies to the wide range of operating temperature from -30℃~ +75℃  with stable and reliable performance, widely applied to various broadband data transmission fields such as intelligent transportation, telecommunications, security, financial securities, customs, shipping, power, water conservancy and oil fields.

## Features

- Complies with the IEEE 802.3, IEEE 802.3u Fast Ethernet standard
- Auto-MDI/MDI-X detection and negotiation in half/full-duplex modes for 10/100/1000Base-TX RJ-45 port
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Supports packet size of up to 10K bytes
- Robust IP40 protection, fan-less design, high/low temperature resistance -30℃~ +75℃
- Wide power supply input DC12V-58V redundant
- CSMA/CD protocol
- Automatic source address learning and aging

# Specifications

| Provider Mode Ports | |
| --- | --- |
| Fixed Port | 2*10/100/1000Mbps Ethernet Port, 1*1000Mbps SFP Port |
| Power Interface | Phoenix terminal, Dual power input |
| LED Indicators | PWR, Link/ACT LED |
| **Cable Type & Transmission Distance** | |
| Twisted-pair | 0-100m (CAT5e, CAT6) |
| Mono-mode Optical Fiber | 20/40/60/80/100KM |
| Multi-mode Optical Fiber | 550m |
| **Network Topology** | |
| Ring Topology | Not support |
| Star Topology | Support |
| Bus Topology | Support |
| Tree Topology | Support |
| Hybrid Topology | Support |
| **Electrical Specifications** | |
| Input Voltage | Redundant DC12-58V input |
| Total Power Consumption | <5W |
| **Layer 2 Switching** | |
| Switching Capacity | 14Gbps |
| Packet Forwarding Rate | 10.416Mpps |
| MAC Address Table | 8K |
| Buffer | 1M |
| Forwarding Delay | <5us |
| MDX/MIDX | Support |
| Jumbo Frame | Support 10K bytes |
| LFP | Support |
| Storm Control | Support |
| Port Isolation | Support |

**DIP Switch**

| | |
|---|---|
| 1 LFP | LFP/ Remote PD Reset |
| 2 LGY | LEGACY (Standard & Non-standard PoE) |
| 3 VLAN | Port Isolation |
| 4 RST | Reset |

**Environment**

| | |
|---|---|
| Operating Temperature | -30℃~+75℃ |
| Storage Temperature | -30℃~+85℃ |
| Relative Humidity | 10%~95% (non-condensing) |
| Thermal Methods | Fanless design, natural heat dissipation |
| MTBF | 100,000 hours |

**Mechanical Dimensions**

| | |
|---|---|
| Product Size | 118*91*31mm |
| Installation Method | Din-Rail |
| Net Weight | 0.4KGs |

**EMC & Ingress Protection**

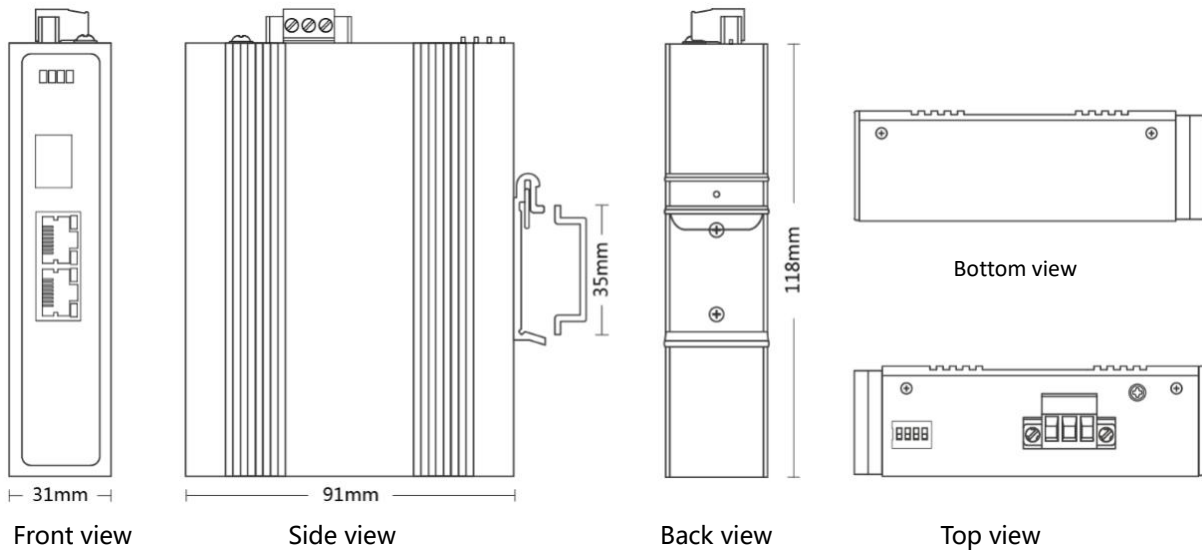| | |
|---|---|
| IP Level | IP40 |
| Surge Protection of Power | IEC 61000-4-5 Level 3 (4KV/2KV) (8/20us) |
| Surge Protection of Ethernet Port | IEC 61000-4-5 Level 3 (4KV/2KV) (10/700us) |
| ESD | IEC 61000-4-2 Level 4 (8K/15K) |
| Free Fall | 0.5m |

**Certificate**

| | |
|---|---|
| Security Certificate | CE, FCC, RoHS |

# Dimensions



Front view          Side view          Back view          Top view

Bottom view

31mm          91mm          35mm          118mm

# Ordering Information

| P/N | Description |
| --- | --- |
| TH-4G0102 | Unmanaged Industrial Media Converter<br>1x1000Mbps SFP Port, 2x10/100/1000M RJ45 Port |
| TH-4G0102P | Unmanaged Industrial PoE Media Converter<br>1x1000Mbps SFP Port, 2x10/100/1000M RJ45 Port PoE |