# 701MI Industrial Ethernet Extender with 2-port RJ-45 and a M12 connector

## Introduction

**Proscend 701MI**, an **industrial-grade 2-port 10/100Base-TX RJ-45 Ethernet Extender with a M12 connector**, is designed to extend the reach of Ethernet data over existing coaxial cable beyond 100m distance limitation for industrial applications. Due to M12 Ethernet connector design, the **701MI** is perfectly adapted to unprotected industrial environments for reliable data transmission and protection against severe interference.

Utilizing VDSL2 Technology, the **701MI** offers fastest data transmission up to 100 Mbps rate within 300M, or 20 Mbps bandwidth for 1.2 Km long range connections. Built in wide temperature operation range from -40°C to 75°C with a rugged IP30 aluminum housing, the **701MI** is suitable for use in harsh environments. The **701MI** is resistant to shock and vibration for maintaining signal integrity and performance.

To fulfill the market demand, the **701MI** is equipped with **two Ethernet ports** and **a M12 connector** for expanding at least 3 devices. A user-friendly DIP switch can be adjusted three modes, VDSL2 'Band-Plans' (Asymmetric or Symmetric), SNR margin (6dB or 9dB) and Master or Remote mode. It also can be set up to connect with the other **701MI** or with other PROSCNED Long Reach PoE extenders — the 100MP with one PoE (PSE) port and 101MP with four PoE (PSE) ports for each power budget of 30W that can support any remote IEEE 802.3at powered device (PD) like Wi-Fi Access Point, IP phone, and IP Camera. **Proscend 701MI Ethernet Extender** is the superior choice for quick deployment and efficient installation to reduce cost and extend reliable connections between industrial networking.

## Features

- 3-port 100Base-T Ethernet over VDSL2 to provide high data rates over long distances
- Built-in M12 connector to strengthen mechanical connection
- 2-port RJ45 Ethernet and a M12 connector for plug-n-play devices expansion
- M12 connector protection against environmental disturbances
- Industrial rated for -40 to +75 °C operation
- Rugged IP30 aluminum enclosures
- Easy deployment and efficient installation in harsh environments

## Ordering Information

| Model Name | Description |
|---|---|
| 701MI | Industrial Ethernet Extender with 3 Ethernet ports (2 x RJ-45 + 1 x M12 connector) |

# Specifications

## Hardware Interface

- 6-pin Terminal Block for Copper Port
- BNC Female for Coaxial Port
- 2 x 10/100Base-T-Tx port with RJ-45 connectors
- 1 x 10/100Base-T-Tx port with M12 connector (4-pin, D-code)

## 3 Position Dip Switch

- Selectable target band plan (Asymmetric or Symmetric)
- Selectable target SNR margin (6dB or 9dB)
- Selectable CO or RT

## LED Indicators

- Power 1, 2
- Per 10/100TX Port: Link/Activity, Full-duplex
- Line Speed(Mbps): Link/20/40/60/80/100

## Power Supply

- Terminal blocks for redundant DC power inputs
- Input Voltage: 12 to 48 VDC (10V~60 VDC Max)
- Power Consumption: 5 Watts maximum
- Over current protection
- Reverse polarity protection

## Standards Support

- VDSL2 ITU-T G.993.2
- VDSL2 Profiles: 17a and 30a

## Protocol Support

- Transparent bridging to higher layer protocols

## Operating Environment

- Operating Temperature: -40°C to 75°C
- Storage Temperature: -40°C to 85°C
- Humidity: 5% - 95% (non-condensing)

## Physical

- Hardened aluminum case, IP30
- Dimensions (W x D x H): 62 x 135 x 106.5 mm
- Installation: DIN-Rail Kit , Wall-Mount Kit

## Regulatory Compliance

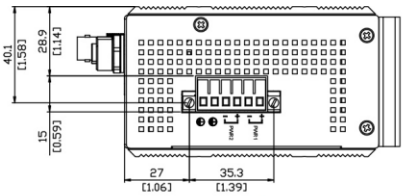
- Safety : UL60950-1, EN60950-1, IEC60950-1
- EMI : CE, FCC Part 15B Class A, EN 61000-6-4
- EMS : EN61000-6-2 , EN61000-4-2(ESD), EN61000-4-3(RS) , EN61000-4-4(EFT) , EN61000-4-5(Surge) , EN61000-4-6(CS) , EN61000-4-8
- Rail Traffic : EN50155 (In Plan)
- Shock: IEC 60068-2-27 (In Plan)
- Freefall: IEC 60068-2-32 (In Plan)
- Vibration: IEC 60068-2-6 (In Plan)

## Performance

| Distance | Line Rate |
|---|---|
| 300m | 100Mbps |
| 400m | 90Mbps |
| 600m | 65Mbps |
| 800m | 45Mbps |
| 1000m | 35Mbps |
| 1200m | 20Mbps |

**The above performance data is for reference only, the actual data rate may vary depending on the quality of the coaxial cable and environmental factors.

# Dimensions

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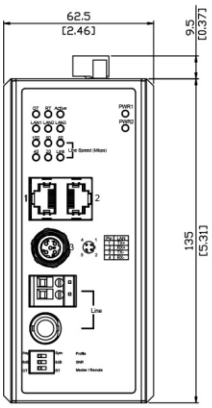


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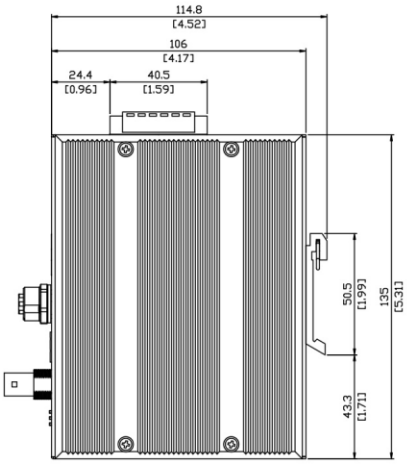


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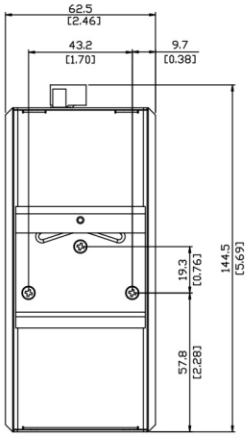


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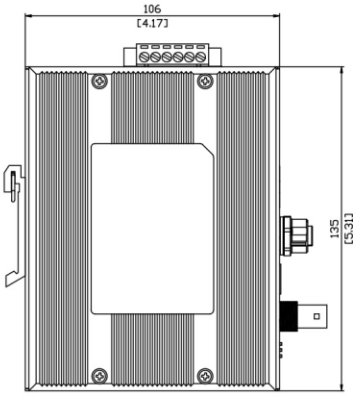


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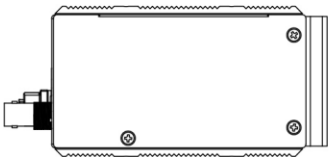

Bottom

* Features and specifications are subject to change without prior notice.


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