

701MI-S Industrial Ethernet Extender with 2-port RJ-45 Connector

Introduction



PROSCEND 701MI-S, an industrial-grade 2-port 10/100Base-TX RJ-45 Ethernet Extender, is designed to extend the reach of Ethernet data over existing coaxial cable beyond 100m distance limitation for industrial applications. The **701MI-S** is a cost-effective Ethernet Extender for reliable data transmission and flexible networking extension.

Utilizing VDSL2 Technology, the **701MI-S** 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-S** is suitable for use in harsh environments. The **701MI-S** is resistant to shock and vibration for maintaining signal integrity and performance.

To fulfill the market demand, the **701MI-S** is equipped with **two Ethernet ports** for expanding at least 2 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-S** or with other PROSCEND 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-S Ethernet Extender** is an ideal choice for quick deployment and efficient installation to reduce cost and extend reliable connections between industrial networking.

Features

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

Ordering Information

| Model | Description |
|---------|---|
| 701MI-S | Industrial Ethernet Extender with 2 Ethernet ports (2 x RJ-45 connectors) |

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

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

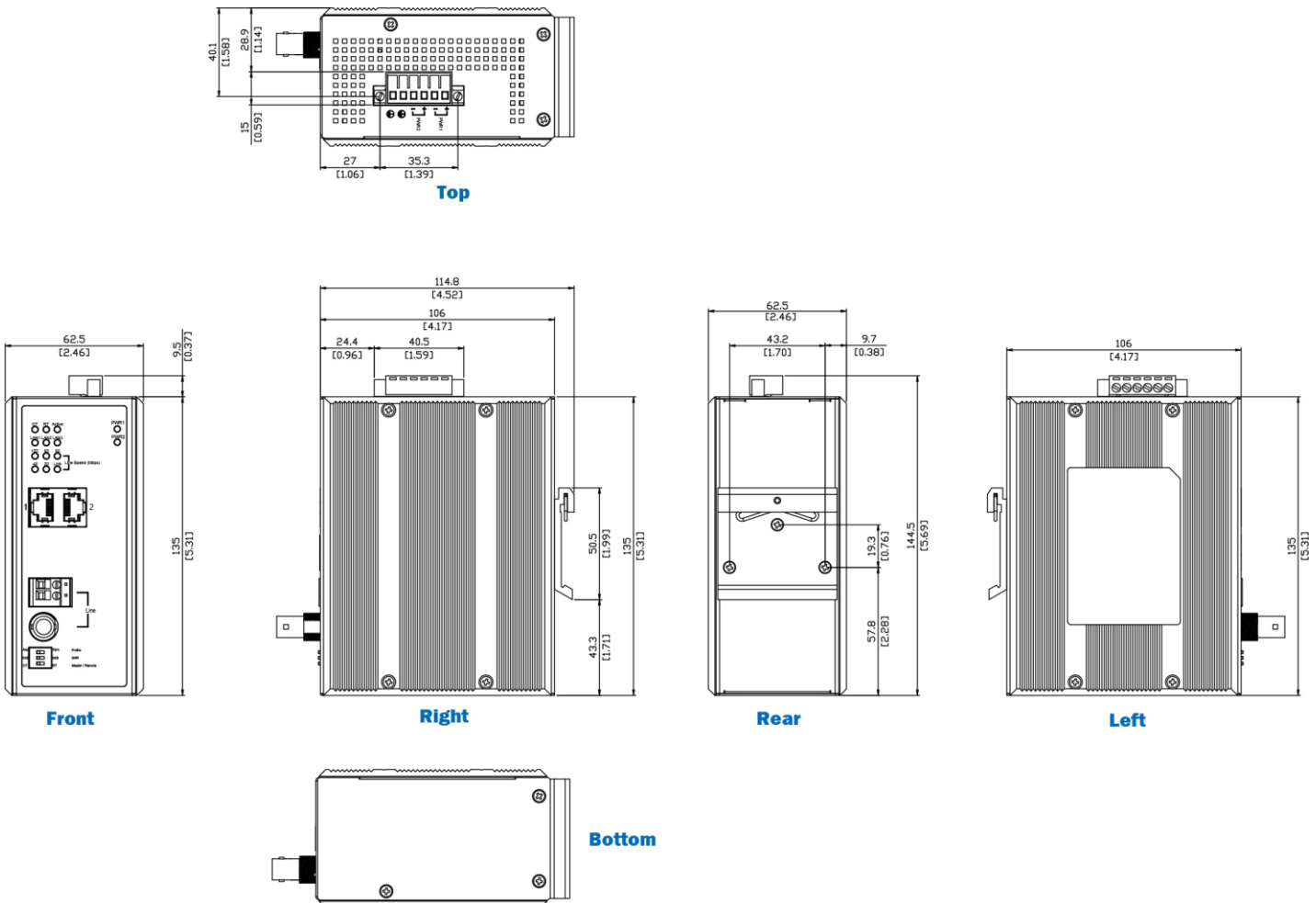
- Safety : UL60950-1, EN60950-1, IEC60950-1
- EMI : CE, FCC Part 15B Class A, EN 61000-6-4
- EMS : EN61000-6-2 , EN61000-4-2(ESD), EN61000-4-3(RS) , EN61000-4-4(EFT) , EN61000-4-5(Surge) , EN61000-4-6(CS) , EN61000-4-8
- Rail Traffic : EN50155 (In Plan)
- Shock: IEC 60068-2-27 (In Plan)
- Freefall: IEC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



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