

ED3601-1

VDSL2 Gigabit Ethernet Extender



Overview

The **EtherWAN ED3601** is an **industrial VDSL2 Ethernet extender** designed to deliver high-speed connectivity **over existing copper wiring**. With **aggregated bandwidth up to 300Mbps** (150Mbps downstream / 150Mbps upstream), it provides **fiber-like network performance** without requiring new fiber installations. This makes it a cost-effective solution for extending Ethernet in areas where fiber deployment is challenging, costly, or physically restricted—such as remote sites, tunnels, and legacy buildings.

The ED3601 features **one Gigabit Ethernet port and one VDSL2 port**, both equipped with **standard RJ45 connectors**, ensuring simple and reliable integration into existing network infrastructure. Housed in a durable **metal enclosure** with DIN-rail mounting support, it is built for harsh industrial environments, including control panels, factory cabinets, and outdoor enclosures.

To maintain stable and optimized performance, the ED3601 automatically adjusts signal settings based on cable distance and quality, enabling **reliable data transmission up to 1.5 kilometers**. Whether for industrial automation, smart city infrastructure, or transportation systems.

EtherWAN — **"When Connectivity is Crucial."**

Highlights

+ High-Speed Ethernet Extension over Copper

- Supports up to 300Mbps aggregated bandwidth(150Mbps down / 150Mbps up) within 300 meters.
- Extends Ethernet up to 1.5 km in symmetric mode.
- Delivers fiber-like speed over standard UTP, CAT 5e/6/7 cables.

+ Flexible and Reliable Deployment

- Works with existing twisted wiring.
- Provide 8 configurations to meet different application needs.
- Plug-and-play with standard UTP cable.

+ Industrial-Grade Design

- Durable metal housing for harsh environments.
- Automatically adapts to cable length and quality for stable transmission.

Specifications

+ Interface

Ethernet Port

- Port: 1 x RJ45
- Speed: 10/100/1000BASE-T

VDSL2 Port

- Port: 1 x RJ45

DIP Switch

- DIP 1: RT (Remote) / CO (Master)
- DIP 2: Asymm / Symm
- DIP 3: Interleave / G.INP
- DIP 4: SNR High / Low

LED Indicators

- System power
- RT / CO mode
- VDSL2 link status
- Ethernet link status

+ Physical

Casing Material

- Metal

Dimensions

- 72.5 x 94.5 x 23 mm (W x D x H) (2.85" x 3.72" x 0.9")

Weight

- 0.22 kg (0.485lbs)

Installation Type

- DIN-rail mounting (top hat type 35mm)

+ Regulatory

ISO

- Manufactured in ISO-9001 facility

Safety

- EN 62368-1

EMI

- FCC Part 15B Class A
- VCCI Class A
- EN 55032:2015+A11:2020
- EN 55035:2017+A11:2020

EMS

- EN 61000-4-2 (ESD)
- EN 61000-4-3 (Radiated RFI)
- EN 61000-4-4 (Burst)
- EN 61000-4-5 (Surge)
- EN 61000-4-6 (Induced RFI)
- EN 61000-4-8 (Magnetic field)

Vibration

- IEC 60068-2-6 Fc

Shock

- IEC 60068-2-27 Ea

Free Fall

- IEC 60068-2-31

+ Environmental

Operating Temp.

- -20 to 65 °C (-4 to 140°F)

Storage Temp.

- -40 to 70 °C (-40 to 158°F)

Relative Humidity

- 0% to 95% HR (non-condensing)

+ Technology

Standards

- IEEE 802.3 10BASE-T
- IEEE 802.3u 100BASE-TX
- IEEE 802.3ab 1000BASE-T

Processing Type

- Auto-Negotiation
- Auto-MDI / MDI-X

+ Power

Input

- 12 ~ 24VDC (Terminal block)

Power Consumption

- 4.5Watts

Protection

- Over Current Protection
- Reverse Polarity Protection

+ Warranty

Length

- Limited lifetime warranty

Details

- www.etherwan.com/support/warranty-policy

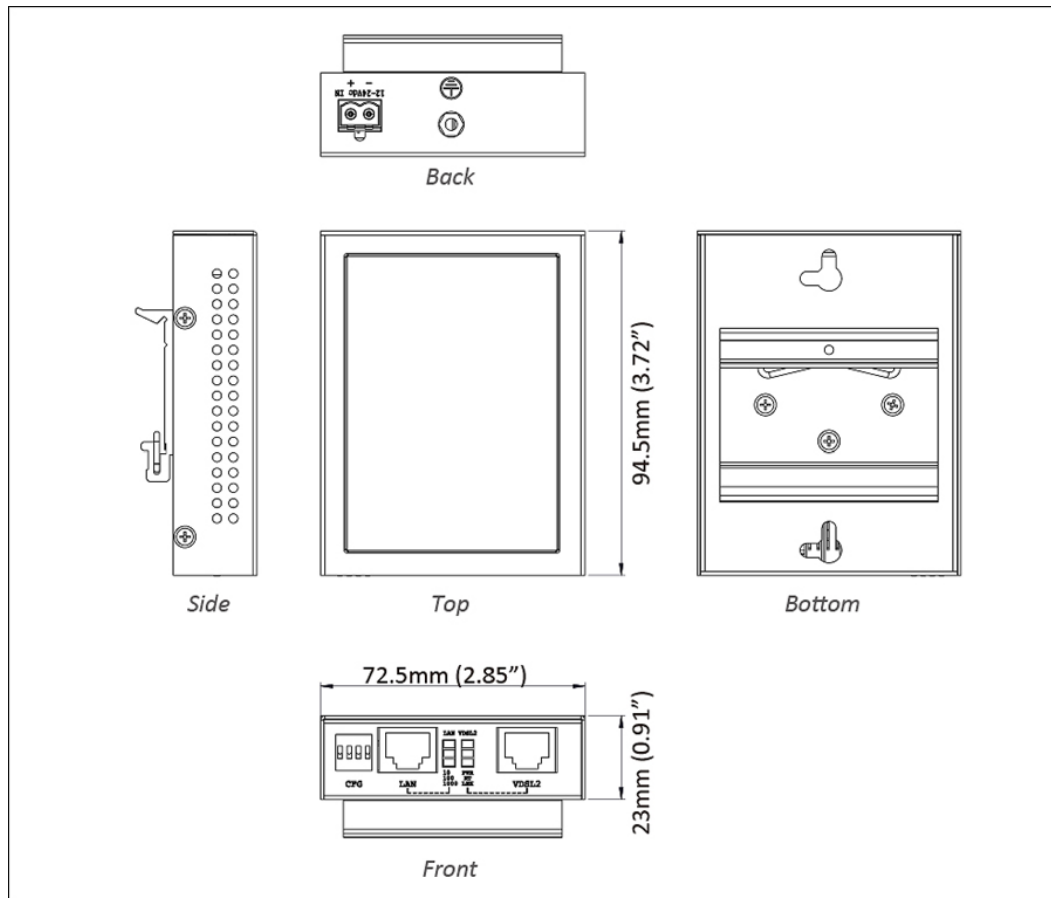
Performance

Symmetric		
UTP CAT6, SNR Low, G.INP		
Distance (m)	Downstream (Mbps)	Upstream (Mbps)
200	125	133
400	102	112
600	79	72
800	33	41
1000	79	72
1200	33	41
1400	79	72
2000	5	12
2600	0	0

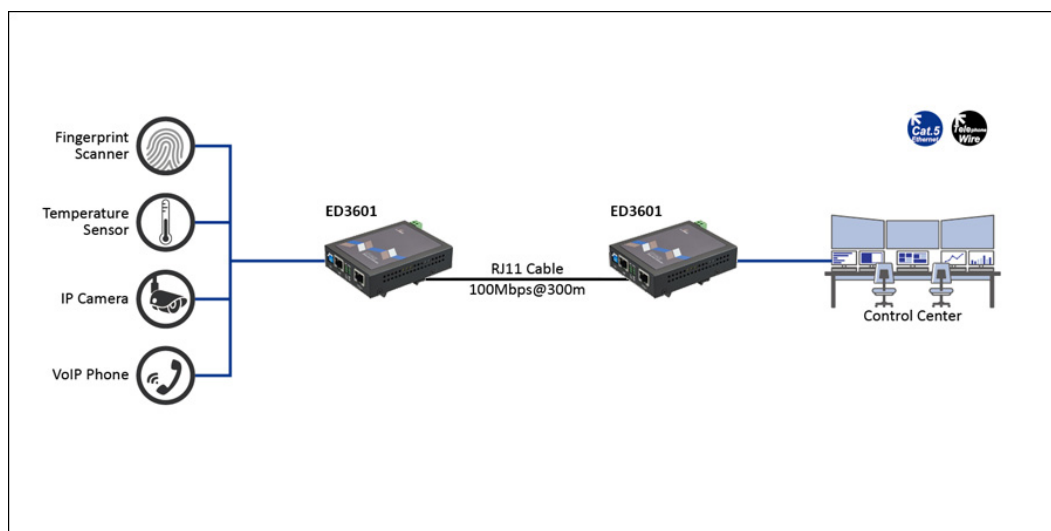
Asymmetric		
UTP CAT6, SNR Low, G.INP		
Distance (m)	Downstream (Mbps)	Upstream (Mbps)
200	55	253
400	50	169
600	44	67
800	27	60
1000	14	40
1200	9	32
1400	6	23
2000	<1	10
2600	0	0

*** Note.** This distance/data rate information is measured according to testing standards in the EtherWAN laboratory. The actual installation and connection speed will be affected by the quality of copper wire and the impact of noise disturbance.

Dimensions



Application



Ordering Info

+ Model

ED3601	VDSL2 Gigabit Ethernet Extender
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* DIN-Rail mounting kit included.

+ Optional Accessories

HDR-30-24	30W/1.5A DIN-Rail 24VDC Industrial Power Supply
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+ Accessories

DIN-Rail Power Supplies	www.etherwan.com/products/din-rail-power-supply (*)
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