ED3601

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.

Industrial-Grade Design

Durable metal housing for harsh environments.

Automatically adapts to cable length and quality for stable transmission.

Flexible and Reliable Deployment

Works with existing twisted wiring.

Provide 8 configurations to meet different application needs.

Plug-and-play with standard UTP cable.

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

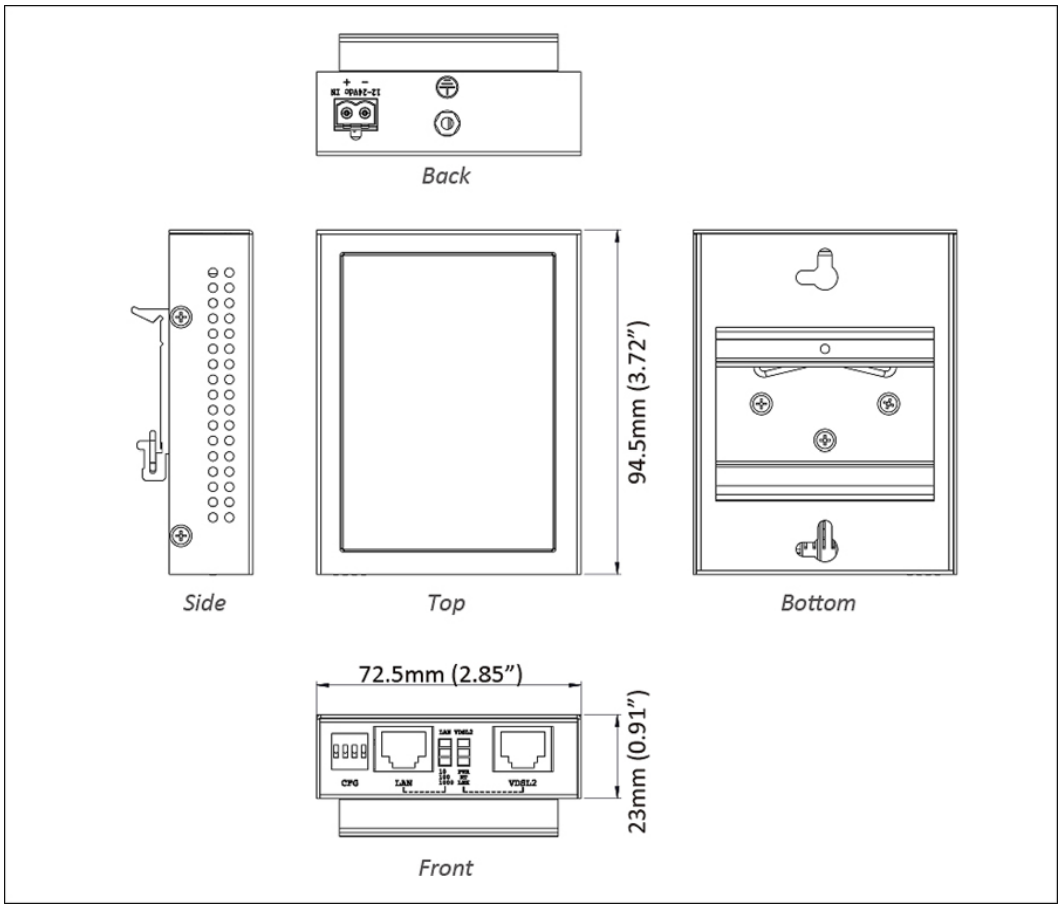
Performance

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

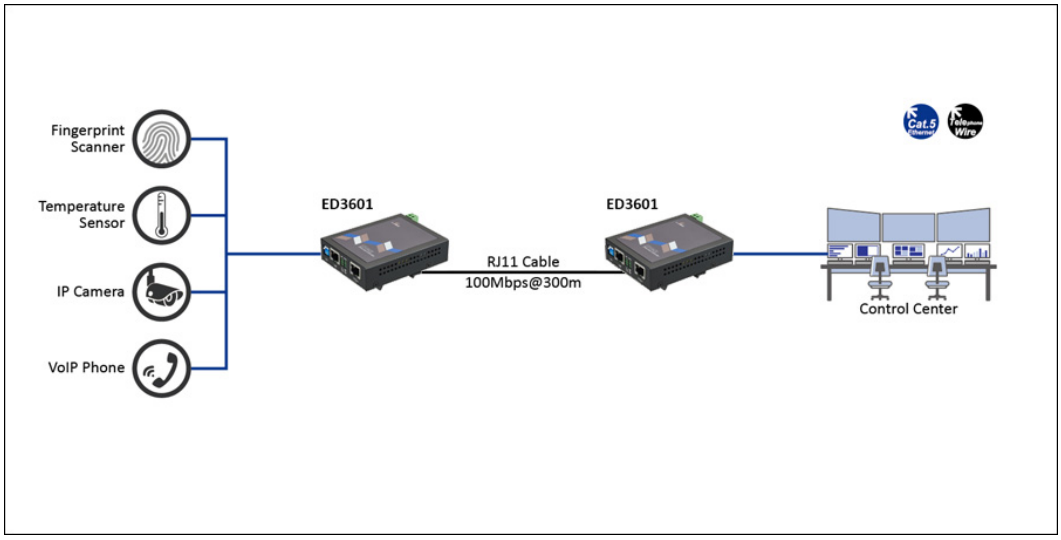
Asymmetric	UTP CAT6, SNR Low, G.INP	
Distance (m)	**Downstream (Mbps)**	**Upstream (Mbps)**
200	55	253
400	50	169
600	44	67
800	27	60
1000	14	40
1200	9	32
1400	6	23
2000	<1	10
2600	0	0

*** 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

* DIN-Rail mounting kit included.

Optional Accessories

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

Accessories

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

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