# **VDS-2201**

# **Industrial Ultra-Speed VDSL2 Extender**





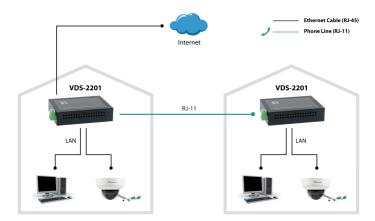
#### Introduction

LevelOne VDS-2201 is an Industrial Ultra-Speed VDSL2 Extender that supports VDSL2 profile 35b/30a/17a with a remarkable aggregated bandwidth of over 300Mbps. It delivers fiber optic-like speeds on existing copper infrastructure, enabling a good alternative in the place where fiber is not economical to deploy. The VDS-2201 is equipped with a Gigabit Ethernet port (RJ45 connector) and one VDSL2 port (RJ45 connector) in the metal enclosure for easy installation in a hardened environment. The symmetric configuration can be applied as a long-reach Ethernet connection up to 3,000 feets, while an Asymmetric configuration can be used for other services like video streaming or IP surveillance services which require high traffic flow in a unidirection configuration.

#### **Features**

- Ultra-Speed Ethernet extension over UTP, CAT 5e/6/7, or Coaxial cables
- Easy DIP switch configuration to best perform in various cable infrastructure
- Cost effective bridge function to connect two Ethernet networks or devices
- IEEE 802.1Q VLAN tag transparent
- Support a wide operating temperature range
- Plug-and-play installation in harsh environments

## **Application**





# **Specifications**

#### **VDSL2** Interface

- RJ45 connector
- DMT Encoding
- On-board surge protection

#### **LAN Interface**

- 1 x RJ45 connector
- 10/100/1000 Base-T; Auto-Negotiation, Auto-MDI/MDI-X.
- Complying with IEEE 802.3/802.3u/802.3z

#### 4-position DIP Switch

- Selectable Master(CO) or Remote(RT) mode
- Selectable Symmetric or Asymmetric mode
- Selectable G.INP or Interleave mode
- Selectable SNR High and SNR Low

#### LED

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

#### **Power Supply**

- 12~24 VDC over terminal block
- Power Consumption: 4.5 Watts (Max)

#### **Power Wiring**

- 2-PIN Terminal Block
- Wire range: 0.2 mm<sup>2</sup> to 2.5 mm<sup>2</sup>
- Solid wire (AWG):12-28
- Stranded wire (AWG): 12-30
- Torque:5 lb-In / 0.5 Nm / 0.56 Nm
- Wire strip length: 7-8 mm
- Max wire length: 3m (9.84 ft)

### **Environment**

- Operating Temperature: -20~65°C
- Storage Temperature: -40~ +70°C
- Humidity: 0~95%HR (non-condensing)

#### **Physical Characteristics**

■ Dimension (W x H x D): 94.5 x 23.0 x 72.5 mm ■

Weight: 220g

■ Installation (Optional): Wall Mounting or DIN-rail

#### **Front Panel**



#### Performance

UTP, 26AWG			
Symmetric, SNR Low, G.INP			
Distance	Upstream Line Rate	Downstream Line Rate	
(Feet)	(Mbps)	(Mbps)	
500	146	162	
1,000	116	112	
2,000	35	61	
3,000	28	30	

UTP, 26AWG			
Asymmetric, SNR Low, Interleave			
Distance	Upstream Line Rate	Downstream Line Rate	
(Feet)	(Mbps)	(Mbps)	
500	64	284	
1,000	59	171	
2,000	31	67	
3,000	10	35	

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

## **Regulatory Compliance**

- CE & UKCA Class A
- FCC Part 15 Class A
- EN62368

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

