UVE7312-MSPE

Ethernet over VDSL2 PoE (PSE) LAN Extender

Connects over two Ethernet LANs over VDSL2 technology

--FEATURES--
- ITU-T G.993.1/2 VDSL2 SG15Q4 DMT Compliance
- Complies with IEEE802.3u 100Base-TX standard
- Complies with IEEE802.3  10Base-T standard
- Complies with IEEE802.3af PoE PSE for Class 0 ~ 3
- PSE supports output voltage from 44 ~ 57 volt
- Supports 1 x RJ-11 Port for Line Power over DSL2
- Supports 1 x RJ-45 ports for 10/100Mbps Ethernet
- VDSL2 port supports up to 100Mbps downstream and 60Mbps upstream for distance up to 300 meters
- Trellis Coding supports up to 1024 Discrete Multi-Tone (DMT) bin
- Supports a VDSL2 connection up to 1,500 meters over single pair RJ-11 telephone copper wire
- Features selectable Fast and Interleaved modes
- Selectable fixed data rate and fixed SNR margin
- Provides a piano 4 DIP switches for Master / Slave (CO/CPE) mode selection
- Low-Latency for Video/Voice/Data applications
- Plug-&-Play without any software configuration
- Transparent to all kind of network protocols
- Provides rich diagnostic LED indicators

--OVERVIEW--
UVE7312-MSPE, Ethernet over VDSL2 PoE PSE converter, provides power supply over Ethernet cable to Ethernet PD device with voltage in the range from 44 to 57 volt. It is also an access standard technology that allows carriers to deliver data up to 100Mbps downstream and 60Mbps upstream paths over the existing copper plant. It featured single conversion technology between standard Ethernet and innovative VDSL2 over Ethernet one the telephone line for point-to-point connectivity. This converter is an ideal solution to extend the distance of local area network from 100 meters to 1,500 meters. The VDSL2 LAN Extender allows voice and data to be transmitted on the same line, saving a lot of redundant cost of wiring. Users may also select a fixed data rate or fixed SNR margin for different copper line ranging.

For network system integrators, this product is the best choice for planning centralized Internet access for hotels, offices, apartments and campus environment. In addition, it will allow operators to compete with cable and satellite providers by offering service such as high definition TV (HDTV), Video-on-demand, video-conferencing, FTTB, high speed internet access and advanced voice service like VoIP, over single twisted pair telephone line. The VDSL2 technology is a cost effective solution to be used as last mile line into the home or office while the ISP and Telcos use Fiber optic lines as the backbone.

The converter is plug-&-play without any software configuration and fully compliant with all kinds of network protocols. Moreover, rich diagnostic LEDs on the front-panel for providing the operating status of the system.
## System Specifications

| Standards | IEEE802.3 10BASE-T  
| IEEE802.3u 100BASE-TX  
| IEEE802.3af PoE PSE (Power over Ethernet), Class 0 ~ 3  
| VDSL2 ITU-T G.993.1/2, SG15Q4 DMT compliance  
| Network Data Rate | Ethernet: 10/100Mbps  
| VDSL2: Up to 100/60Mbps (Downstream/Upstream)  
| PSE | IEEE802.3af compliant with output voltage within 44 ~ 57 Volt  
| Safety-Extra-Low-Voltage (SELV) compliant  
| Maximum 15.4w power level for Class 0 ~ 3  
| Power auto restart with Under Voltage Lockout (UVLO) Fault Detection  
| Mode Control | Master Mode: Acts as Master (CO)  
| Slave Mode: Acts as Slave (CPE)  
| VDSL2 Speed | Downstream: 100Mbps over 300m  
| Upstream: 60Mbps over 300m  
| LAN Interface | 1 x RJ-45 connector: 10/100M Fast Ethernet PoE PSE port  
| VDSL2 Interface | 1 x RJ-11 connector: Ethernet over VDSL2 Port  
| Cable Connection | RJ-45 (10/100Base-TX): UTP CAT.3 · 4 · 5 (2-pair wire)  
| RJ-11 (VDSL2): AWG26 Telephone Line  
| Cable Length | Ethernet: Maximum 100 meters (UTP LAN cable)  
| VDSL2: Maximum 1,500 meters (RJ-11 Telephone Cable)  

## Hardware Specifications

| LED indicators | Power · LAN · DSL · PSE  
| Dimension | 120(L) x 90(W) x 29(H) mm  
| Weight | 330g  
| Operating Temperature | 0°C ~ 50°C  
| Operating Humidity | 5% ~ 95% non-condensing  
| Power Supply | 12VDC, 2.5A, External Power Adapter  
| Certification | FCC · CE · RoHS  

## Application Diagram

### Ethernet over VDSL2 PoE (PSE) Converter Application Diagram

A pair of VDSL2 converters with PoE PSE featured that provides power supply over Ethernet cable to Ethernet PD device is the best solution for bandwidth-hungry applications such as video streaming and FTTB over telephone line to extend connection for long distance.

## Ordering Informations

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<th>Model</th>
<th>Description</th>
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| UVE7312-MSPE | Ethernet over VDSL2 PoE PSE converter  
| UVE7312-MSPD | Ethernet over VDSL2 PoE PD converter  

EUSSO Technologies, Inc. is a dedicated data communication and networking company. With professional experiences in design, production, marketing and service support, we deliver the full range networking products including Gigabit Ethernet, Fiber Optic, Wireless LAN, Switches, Hubs, LAN cards, PCMCIA adapters, Converter, Transceivers. As well as Internet Telephony Gateway, Print Servers, Internet Sharing Servers and many others.