# D-Link®

DEV-304

VDSL over Ethernet bridge with 4 Ethernet switch ports for connection to 4 computers.

# VDSL Bridge Remote Unit With Built-in 4-Port Fast Ethernet Switch

*The DEV-304 VDSL Bridge Remote Unit leverages the extraordinary bandwidth promise of VDSL technology, the next step in the delivery of new high-speed Internet applications to home and office users. As a CPE (customer premise equipment), this device is quick, easy and economical to install. It provides seamless bridging from VDSL to Ethernet, allowing 4 personal computers to connect to a VDSL line. This devices provides a VDSL interface and 4 Fast Ethernet switch ports for connection to 4 computers/Ethernet devices.*

## High-speed Internet Access

With this Bridge Remote Unit, you can access high-speed VDSL for smooth delivery of streaming media, video conferencing, media-rich Web surfing and intensive data exchange. VDSL operates over the copper wires in your phone line in much the same way that ADSL does, but at as high as 52Mbps downstream (to your computer) and 16Mbps upstream (from your computer). This compares with 8Mbps downstreams and 800Kbps upstreams for the highest ADSL G.dmt full rate.

## Proven Performance at 1,500 Meters

The device delivers VDSL speeds at extended cable distance coverage. Proven distance is 1,050 meters (3,000 feet) on the ordinary phone line or Cat. 3 wiring. Depending on the quality of the cable (Cat. 4 or 5 or better), your data throughput can be up to 5Mbps at 1,500 meters, 10Mbps at 1,200 meters, and 15Mbps at 1,050 meters.

## Easy Installation

The DEV-304 can be installed by any computer user. Normally, you will receive your Bridge Remote Unit from your service provider, but the DEV-304 is easy to install, and you can install it by yourself. It provides two RJ-11 ports, one to connect to a VDSL line (wall socket), the other to an ordinary phone. 4 RJ-45 ports plug to 4 Ethernet interfaces of your computers.

## Built-in POTS Splitter

The DEV-304 also supports POTS traffic, including ISDN or digital phones that coexists with Ethernet over VDSL and telephone service over the same line via a built-in POTS splitter. This allows you to have ISDN data while staying connected to VDSL. Analog voice communication is through the RJ-11 POTS port that can be connected to a telephone set.

## Complete FTTH & FTTB Solution

The DEV-304 is part of D-Link's complete Fiber to the Home (FTTH)/Fiber to the Building (FTTB) high-bandwidth service solution to multi-unit building such as hotels, residential and commercial buildings. It works with D-Link multi-port Ethernet over VDSL switches such as DHS-3224V, and D-Link multi-port voice/VDSL splitters such as DHS-24SP, which can be installed near the patch panel at the end-users' buildings, or at the service provider's sites.

## Features

- *Ethernet-to-VDSL bridge with built-in 4-port switch*
- *VDSL leading standard for broadband equipment deployment in commercial/residential buildings with high-density populations*
- *Complies with ETSI VDSL requirements*
- *4 10/100Mbps Fast Ethernet switch ports for connection to 4 computers*
- *Symmetrical data transfer rates of up to 15Mbps on Ethernet line*
- *Extended cable distance coverage allows computers to locate far away from VDSL line*
- *RJ-11 VDSL wall line connection*
- *Additional RJ-11 connector for phone connection*
- *Built-in ISDN/POTS splitter*
- *Supports sleep mode operation*
- *Supports power back-off algorithm ***
- *Attractive design to lay flat or wall mounting*
- *Configured as slave (NT) VDSL physical device*

*\* Function can be disabled through CO switch runtime codes.*

# DEV-304

## Technical Specifications

### Device

**Device Ports**
- 1 VDSL RJ-11 for wall line connection
- 1 RJ-11 for phone connection
- 4 10/100Mbps RJ-45 Fast Ethernet switch ports

**Key Components**
- Infineon PEB 22822, 10BaseS Data Pump
- Infineon PEB 22811, VDSL Analog Front End
- Infineon PEB 22810, VDSL Line Driver
- CPE VDSL/10 Base-SMLV-QT7011-1
- VDSL SPLITTER VD-7010
- RealTek RTL 8305SB, 5-port 10/100BASE-TX Switch

**LED Indicators**
- Power
- VDSL Link
- Ethernet link/Act (per port)
- Ethernet 10Mbps, 100Mbps speeds (per port)

### VDSL

**Standard**
ETSI VDSL

**Configuration**
Slave (NT) VDSL physical device

**Function Support**
- Built-in ISDN/POTS splitter
- Sleep mode operation
- Power back-off algorithm *

**Symmetrical Data Transfer Rates**
- 5Mbps @ 1,500 m (5,000 ft) distance from line terminal
- 10Mbps @ 1,200 m (4,000 ft) distance from line terminal
- 15Mbps @ t 1,050 m (3,500 ft) distance from line terminal

### Ethernet

**Standards**
- IEEE 802.3 10BASE-T Ethernet
- IEEE 802.3u 100BASE-TX Fast Ethernet
- ANSI/IEEE 802.3 NWay auto-negotiation
- IEEE 802.3x Flow Control
- IEEE 802.1D Spanning Tree

**Full/half Duplex**
Full/half duplex for 10/100Mbps speeds (per port)

**Twisted-pair Rx Reverse Polarity**
Auto-correction (per port)

**Media Interface Exchange**
MDI-II/MDI-X auto uplink (per port)

**MAC Address Table**
1K entries (per device)

**RAM Buffer**
1Mbit (per device)

**Flow Control**
- IEEE 802.3x Flow Control in full duplex mode (per port)
- Back pressure in half duplex mode (per port)

**STP Bridge Path Support**
IEEE 802.1D Spanning Tree compliant

### Physical & Environmental

**Power Input**
- 9V AC/1A
- Through external AC power supply

**Dimensions**
190 mm x 118 mm x 30 mm

**Weight**
300 grams

**Operating Temperature**
0° - 40°C

**Storage Temperature**
-25° - 55°C

**Humidity**
10% - 95% non-condensing

**Emission (EMI) Certification**
- FCC Class B
- CE Class B
- BSMI
- C-Tick

**Safety Certification**
- CSA 950
- UL 1950 - TUV/GS

*\* Function can be disabled through CO switch runtime code.*



ACN 052 202 838

## Ordering Information

**DEV-304**    Ethernet-to-VDSL bridge with 4 10/100Mbps switch ports

*Please specify one of the following after the model number:*

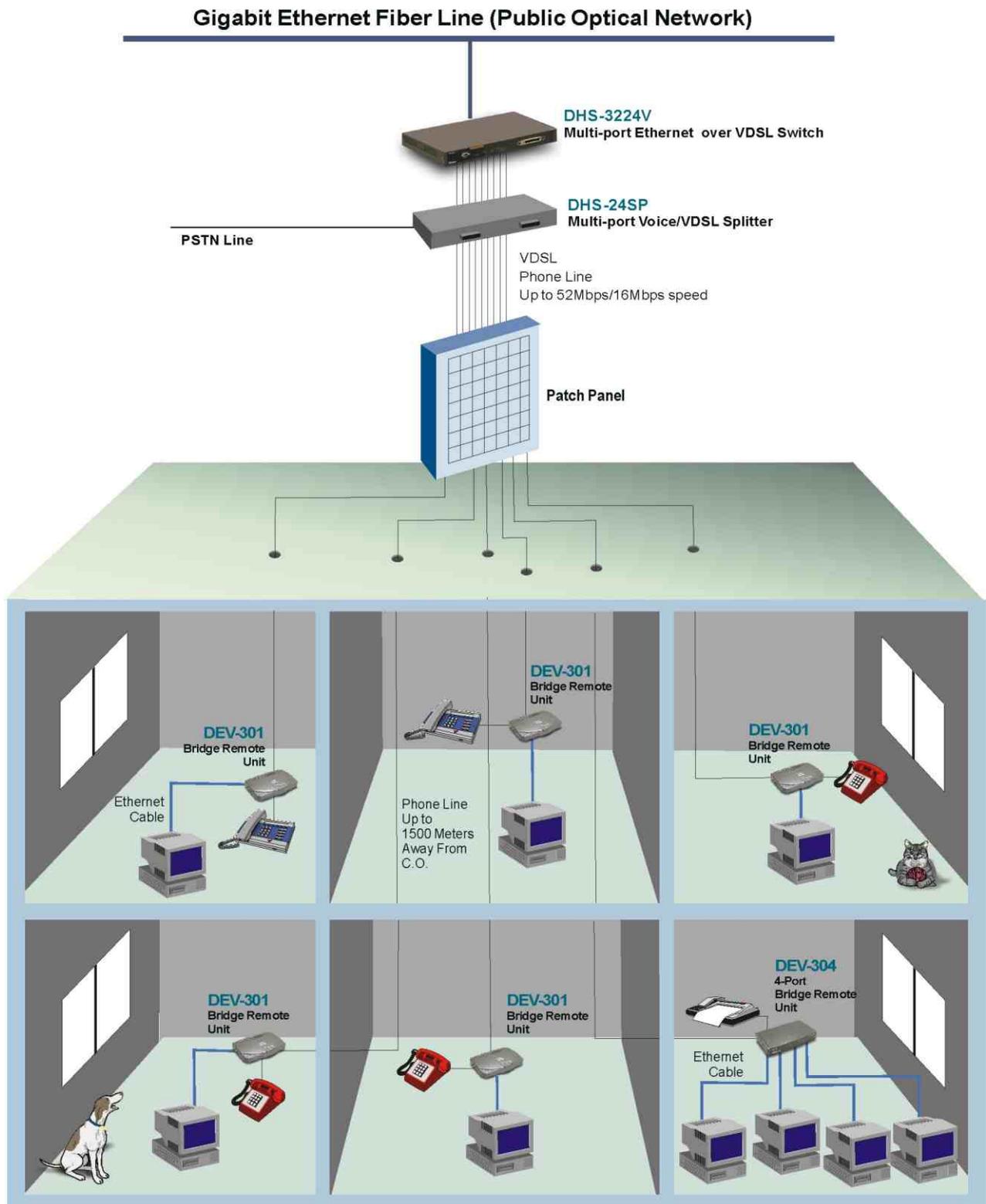| | |
|---|---|
| /U | Includes no AC power adapter |
| /A | Includes an North America standard AC power adapter |
| /E | Includes an EU standard AC power adapter |
| /B | Includes a UK standard AC power adapter |
| /N | Includes an Australia standard AC power adapter |
| /CN | Includes a China standard AC power adapter |

# DEV-304

**Gigabit Ethernet Fiber Line (Public Optical Network)**

**DHS-3224V**
Multi-port Ethernet over VDSL Switch

**DHS-24SP**
Multi-port Voice/VDSL Splitter

PSTN Line

VDSL
Phone Line
Up to 52Mbps/16Mbps speed

Patch Panel

**DEV-301**
Bridge Remote Unit

Ethernet Cable

**DEV-301**
Bridge Remote Unit

Phone Line
Up to
1500 Meters
Away From
C.O.

**DEV-301**
Bridge Remote Unit

**DEV-301**
Bridge Remote Unit

**DEV-301**
Bridge Remote Unit

**DEV-304**
4-Port Bridge Remote Unit

Ethernet Cable

**VDSL Bridge Remote Unit Deployment in Multi-Unit, Multi-Tenant Building.**