

300Mbps Wireless **VDSL2** Bridge Router

VDR-301N



VDSL2 30a 30g	ADSL2+	300 Mbps	IPv6/IPv4 Tunneling Γηυσεμδ	TR-069 Ready Κεσρλ	Multi-SSID 1 2 4 3	QoS
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Presentation Outlines

- ◆ **Product Overview**
- ◆ **Product Benefits**
- ◆ **Product Features**
- ◆ **Applications**
- ◆ **Comparison**
- ◆ **Appendix**

Making Connection with Ease



VDSL2 Introduction



VDSL2 Introduction

◆ What is EoVDSL2 (Ethernet over VDSL2)?

- ✓ VDSL2 (Very-high-data-rate Digital Subscriber Line 2)
- ✓ VDSL2 is the newest and more advanced standard of DSL
- ✓ VDSL2 has been standardized as ITU G.993.2
- ✓ VDSL2 (ITU G.993.2) is an enhancement to VDSL (G.993.1)
- ✓ DMT (Discrete Multi-Tone) line coding

VDSL2 Introduction



◆ DSL Standard

Family	ITU	Name	Ratified	Maximum Speed Capabilities
ADSL	G.992.1	G.dmt	1999	8Mbps down 1Mbps up
ADSL2	G.992.3	G.dmt.bis	2002	12Mb/s down 1Mbps up
ADSL2plus	G.992.5	ADSL2plus	2003	24Mbps down 1Mbps up
ADSL2-RE	G.992.3	Reach Extended	2003	8Mbps down 1Mbps up
SHDSL (updated 2003)	G.991.2	G.SHDSL	2003	5.6Mbps up/down
VDSL	G.993.1	Very-high-data-rate DSL	2004	55Mbps down 15Mbps up
VDSL2 -12 MHz Long reach	G.993.2	Very-high-data-rate DSL 2	2005	55Mbps down 30Mbps up
VDSL2 - 30 MHz Short reach	G.993.2	Very-high-data-rate DSL 2	2006	100Mbps up/down

Product Overview





Product Overview

◆ PLANET VDSL2 CPE

Wireless

Wired

- G.vector
- ADSL2/2+
- Multiple SSIDs



VDR-300NU



VDR-301N



VC-231



VC-234

VDSL2 Bridge

VDSL2 Router



Product Overview

- ◆ **Dimensions: 155 x 60 x 152 mm (W x D x H)**
- ◆ **Power: 12V DC, 0.5A**



Front

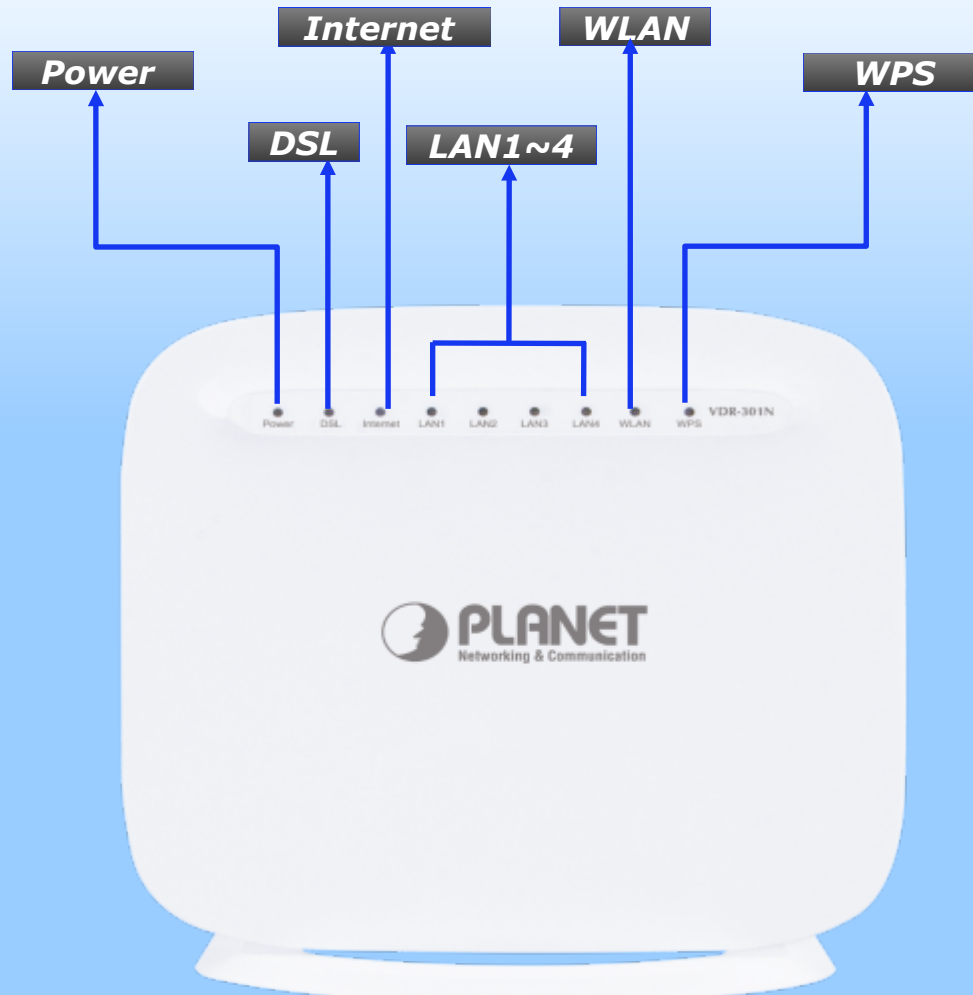


Rear



Product Overview

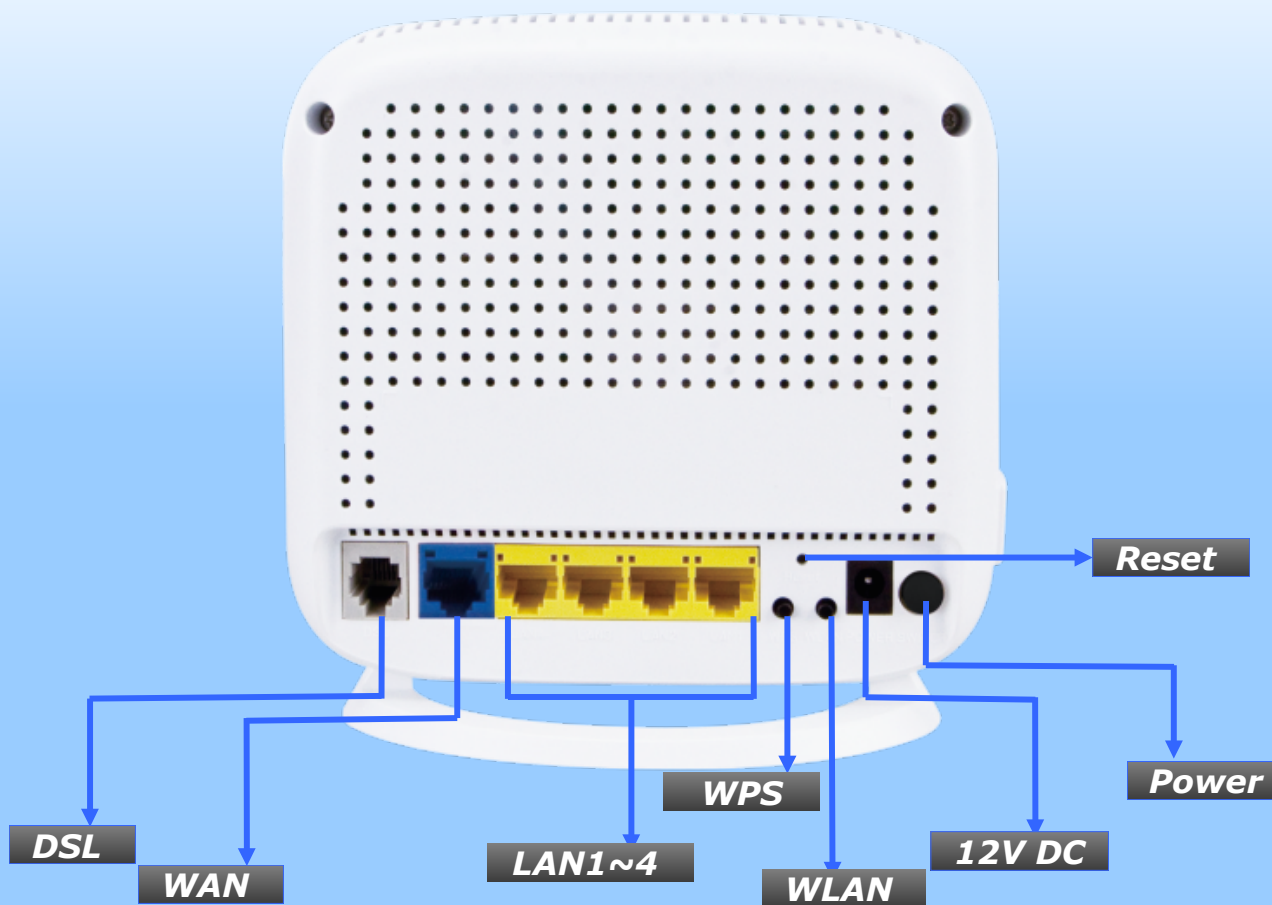
◆ VDR-301N Front Side – LED Indication





Product Overview

◆ VDR-301N Rear Side – Port Indication



Product Benefits

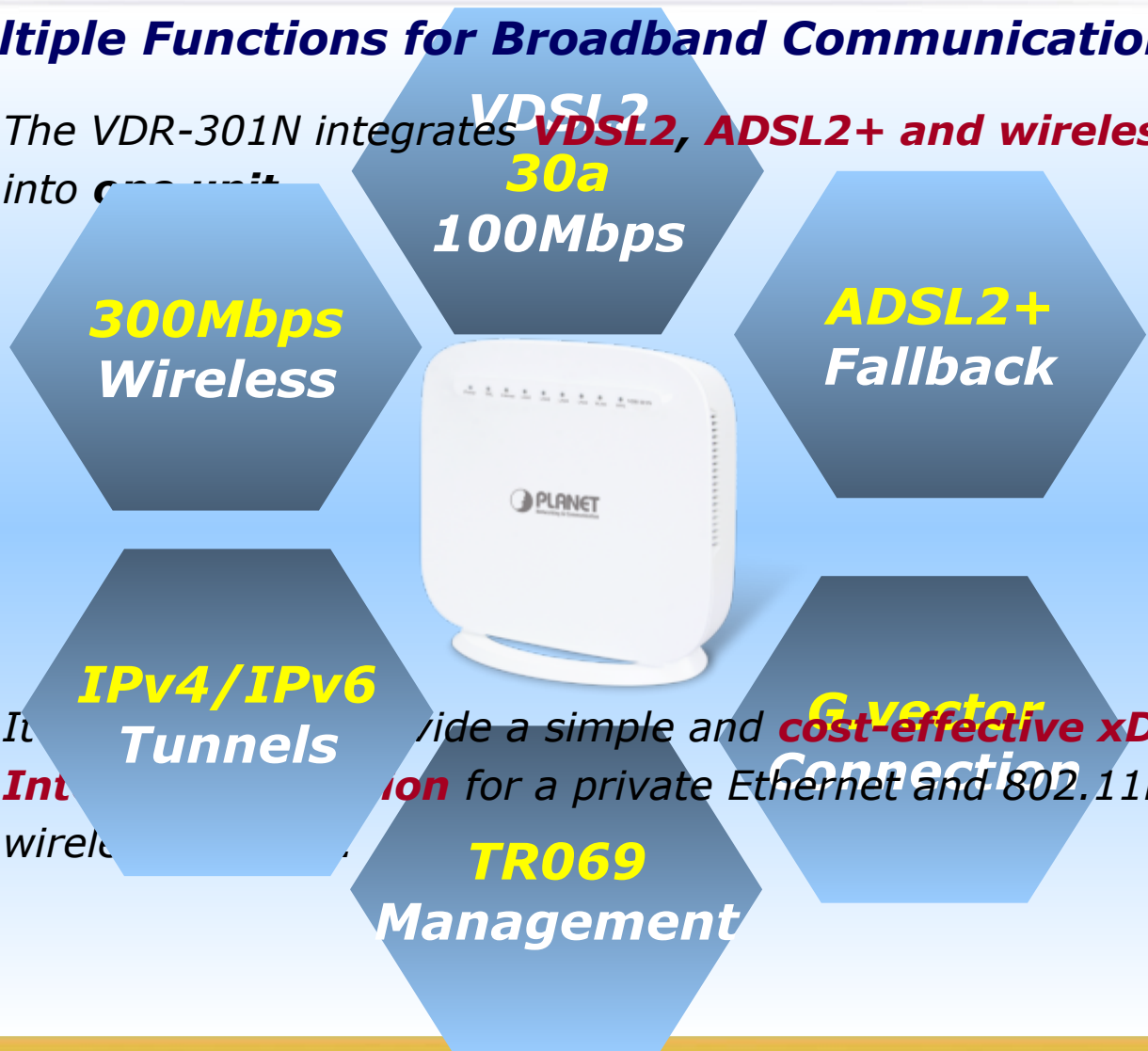




Product Benefits

◆ Multiple Functions for Broadband Communications

- ✓ The VDR-301N integrates **VDSL2, ADSL2+ and wireless LAN** into one unit.



- ✓ It provides a simple and **cost-effective xDSL** **Integration** for a private Ethernet and 802.11b/g/n wireless LAN.

Product Features



Product Features – **VDSL2 30a** **100Mbps**

◆ **High Performance Ethernet Over VDSL**

- ✓ The VDR-301N provides very high performance access to Internet, up to **100Mbps** for both downstream and upstream data transmission.

◆ **ADSL2+ Fallback**

- ✓ The VDR-301N can support transmission rates up to **24Mbps downstream** and **3.5Mbps upstream** with ADSL 2+ technology.



Product Features

◆ G.993.5 Vectoring:

- ✓ **G.993.5 (G.vector)** support for significant reduction of crosstalk levels and improvement of VDSL2 line performance.
- ✓ The VDR-301N works in conjunction with vectoring-enabled DSLAMs to remove crosstalk interference and improve maximum line bandwidth across the existing copper infrastructure.





Product Features

◆ Multiple Network Technologies for Greater Access

✓ Internet Connection Types:

- Bridge
- PPPoE
- PPPoA
- Dynamic IP
- Static IP
- 1483 Routed

◆ IPv6/IPv4 Dual Stack Capability

- ✓ The VDR-301N is the best choice for ISPs to build the **IPv6** FTTx edge service and for SMBs to connect with the IPv6 network.

Product Features

- ◆ **Advanced Networking Function for Specific Application**
 - ✓ Supports **Multiple Bandwidth Control (QoS)** based on different local IP addresses and MAC addresses.
 - ✓ Supports **NTP, Port Trigger, Virtual Server, Port Mapping** and **DMZ** for various networking applications.
 - ✓ Supports **Static Route** and **UPnP**.

- ◆ **Robust TR-069 Remote Management**
 - ✓ Supports **TR-069** (WAN Management Protocol) standard that allows an Auto-Configuration Server (ACS) to perform auto-configuration, provision, collection, and diagnostics to this device remotely.

Product Features

◆ **Secure Wireless and Wired Network Connection**

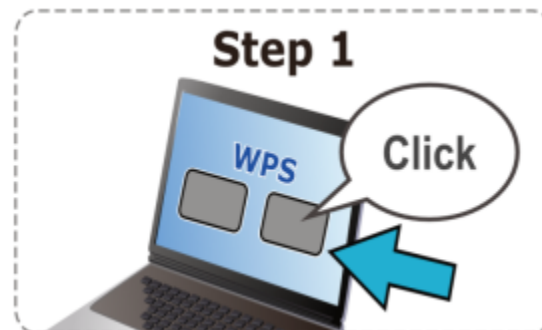
- ✓ Supports **Wi-Fi Protected Setup (WPS)**
- ✓ Advanced security:
 - **64-/128-bit WEP**
 - **WPA/WPA2**
 - **WPA-PSK/WPA2-PSK(TKIP/AES encryption)**
 - **802.1x**

Product Features - WPS Easy Setup

WPS (Wi-Fi Protected Setup) – Quick and Easy Wireless Connection

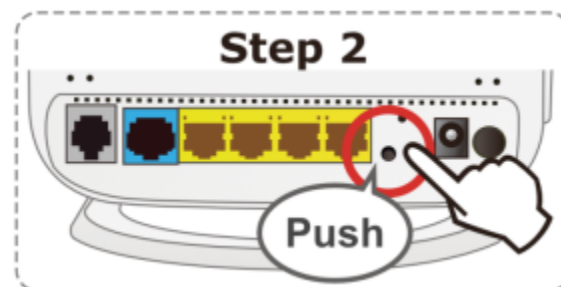
◆ **Step 1**

- ✓ **In the Wireless Client, click the WPS physical Hardware Button or Software Button from the adapter utility**



◆ **Step 2**

- ✓ **In the VDR-301N, push the **WPS Hardware Button** from the rear panel within 2 minutes**



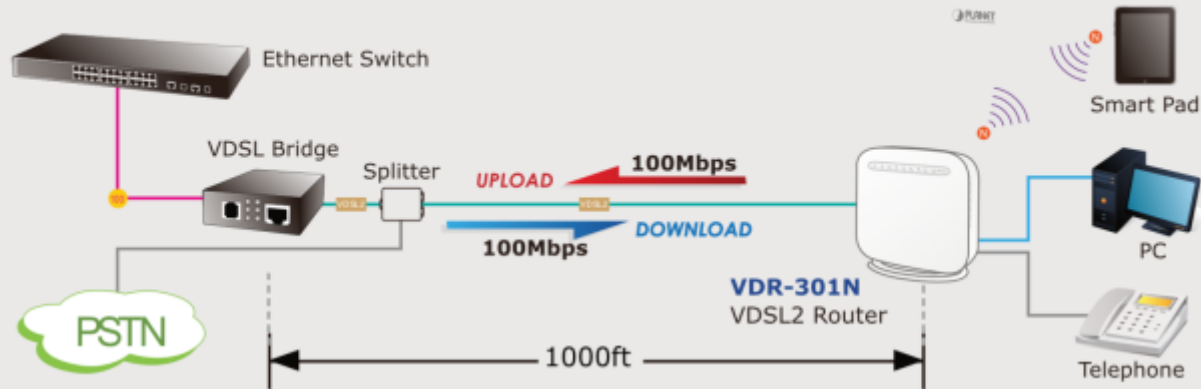
◆ **Step 3**

- ✓ **Wait for the connection being established**

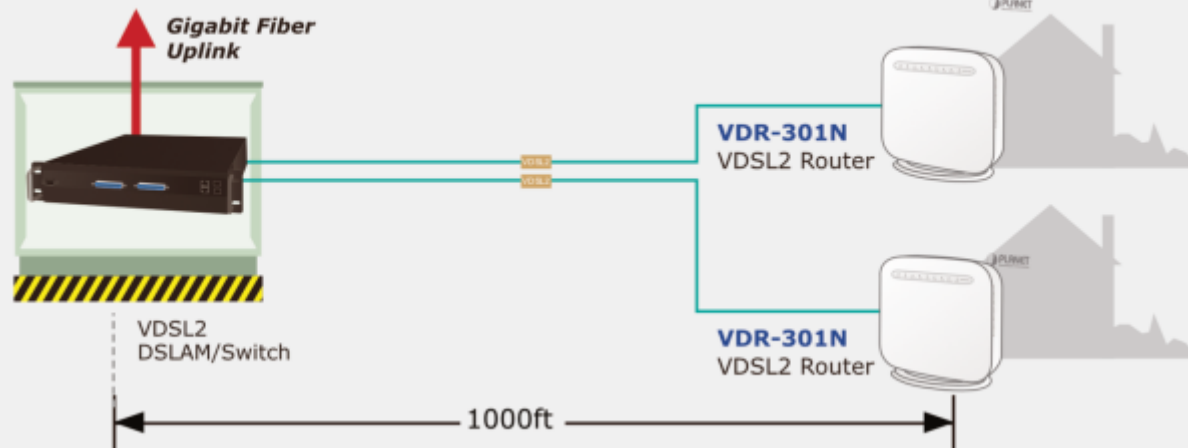


Applications

VDSL2 Point-to-Point



VDSL2 Point-to-Multipoint



Appendix - Sales Target

◆ Target Markets

- ✓ **ISPs, telecoms, system integrators**
- ✓ **Media stream service providers**

◆ Profitable Products

- ✓ **Other VDSL2 products offered include:**
 - VC-820M, VDL-2420M, XDL-2420R
 - VC-231, VC-234

Appendix – Related Products

◆ CO/CPE Equipment

VC-231		Ethernet over VDSL2 Converter (Profile 30a)
VC-234		4-Port Ethernet over VDSL2 Bridge (Profile 30a)
VC-820M		8-Port VDSL2 + 2-Port Gigabit TP/SFP Managed Switch
VDL-2420M		24-Port VDSL2 IP DSLAM + 2-Port Gigabit TP/SFP Combo
XDL-2420R		24-Port VDSL2 / ADSL2+ with 2-Port Gigabit TP/SFP Combo IP DSLAM
IDL-2402 IDL-4802		24-Port ADSL2/2+ IP DSLAM 48-Port ADSL2/2+ IP DSLAM



ACTIVATING IP POWER