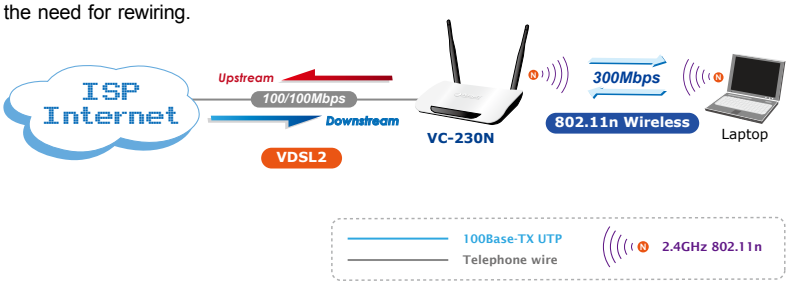
300Mbps 802.11n Wireless VDSL2 Router

High Performance Ethernet over VDSL

PLANET 802.11n Wireless VDSL2 Router, VC-230N, complies with ITU-T G993.2 standard and provides office and residential users with the ideal solution for sharing a high-speed VDSL2 broadband connection and four-10/100Mbps Fast Ethernet backbone. The VC-230N is developed with three core networking technologies: IEEE 802.11b/g/n, Ethernet and VDSL2 (Very High Speed Digital Subscriber Line 2). Via VDSL 2 technology, the VC-230N offers very high performance access to Internet, up to **100Mbps** for both downstream and upstream data transmission. VDSL2 offers the absolute fastest data transmission speed over existing copper telephone lines without the need for rewiring.



Delivering High-Demand Service Connectivity for ISP / Triple Play Devices

The VC-230N provides excellent bandwidth to satisfy the triple play devices for home entertainment and communication. With the capability of 100/100Mbps symmetric data transmission, the VC-230N enables many multi-media services to work on local Internet, such as **VOD (Video on Demand)**, Voice over IP, **Video phone**, **IPTV**, Internet caching server, **distance education**, and so on.

Internet Access Features

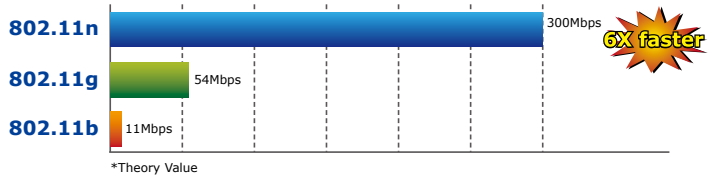
- **Shared Internet Access:** All users on the LAN can access the Internet through the VC-230N using only one single external IP address. The local (invalid) IP addresses are hidden from external sources. This process is called NAT (Network Address Translation).
- **Built-in VDSL2 Modem:** The VC-230N provides VDSL2 modem and supports all common VDSL2 connections.
- **Multiple WAN Connection:** Upon the Internet (WAN port) connection, the VC-230N supports Dynamic IP address (IP address is allocated upon connection), fixed IP address, PPPoE, PPTP and L2TP.
- **CO and CPE Support:** The VC-230N provides the Peer-to-Peer connection. Users can select the CO and CPE mode manually.
- **Bridge and Router Application:** The VC-230N supports two application modes: bridging and routing modes. Currently, the default mode is routing mode. Note: routing mode and bridging mode cannot be used simultaneously.

Advanced Internet Functions

- **Virtual Servers:** This feature allows Internet users to access Internet servers on your LAN. The setup is quick and easy.
- **Firewall:** The VC-230N supports simple firewall with NAT technology.
- **Universal Plug and Play (UPnP):** UPnP allows automatic discovery and configuration of the Broadband Router. UPnP is supported by Windows ME, XP, or later.
- **Selectable VDSL2 Profiles:** The VC-230N supports common VDSL2 profiles (30a, 17a, 12a, 12b, 8a, 8b, 8c, 8d) for users choice. Users can select different VDSL2 profiles based on their needs.
- **User Friendly Interface:** The VC-230N can be managed and controlled through Web UI.
- **DMZ Support:** The VC-230N can translate public IP addresses into private IP address to allow unlimited 2-way communication with the servers or individual users on the Internet. It provides the most flexibility to run programs smoothly for programs that might be restricted in NAT environment.
- **RIP1/2 Routing:** It supports RIPv1/2 routing protocol for routing capability.
- **VPN Pass-through Support:** PCs with VPN (Virtual Private Networking) software are transparently supported - no configuration is required.

High-Speed 802.11n Wireless

The VC-230N applies 2T2R MIMO antenna technology and provides two modes for network applications -- **Bridge** and **Router**. With built-in IEEE 802.11b/g and 802.11n wireless network capability, the VC-230N allows any computer and wireless-enabled network device to connect to it without additional cabling. 802.11n wireless capability brings users the highest speed of wireless experience ever; the data transmission rate can be as high as **300Mbps**. The radio coverage is also doubled to offer high speed wireless connection even in widely spacious offices or houses.



Secure Wireless Access Control

To secure wireless communication, the VC-230N supports most up-to-date encryptions including WEP, WPA-PSK and WPA2-PSK. Moreover, the VC-230N supports WPS configuration with PBC/PIN type for users to easily connect to a secured wireless network.

Multiple Functions for Broadband Communication

There are two selectable VDSL2 operating modes of VC-230N: CO and CPE, which can be adjusted by Web UI. Users can set up Point-to-Point application by connecting two VC-230Ns, in which one in CO mode and the other in CPE mode, to transmit data in high speed between two networks over existing copper telephone lines.

Providing Superior Function

The VC-230N provides user-friendly management interface to be managed easily through standard web browsers. For networking management features, the VC-230N not only provides basic router functions such as DHCP server, virtual server, DMZ, QoS, and UPnP, but also provides full firewall functions including Network Address Translation (NAT), IP/Port/MAC Filtering and Content Filtering. Furthermore, the VC-230N serves as an Internet firewall to protect your network from being accessed by unauthorized users.

LAN Features

- **4-Port Switch:** The VC-230N incorporates a 4-Port 10/100Base-TX switching hub, making it easy to create or extend your LAN.
- **DHCP Server Support:** Dynamic Host Configuration Protocol provides a dynamic IP address to PCs and other devices upon request. The VC-230N can act as a DHCP Server for devices on your local LAN.

Wireless Features

- **Supports IEEE 802.11b, g and 802.11n Wireless Stations:** The 802.11n standard provides backward compatibility with the 802.11b and 802.11g standard, so 802.11b, 802.11g, and 802.11n can be used simultaneously. IEEE 802.11n wireless technology is capable of up to 300Mbps data rate.
- **Two External Antennas with MIMO Technology:** The VC-230N provides farther coverage, less dead spaces and higher throughput with 2T2R MIMO technology.
- **WPS Push Button Control:** The VC-230N supports WPS (Wi-Fi Protected Setup) for users to easily connect to wireless network without configuring the security.
- **WEP Support:** WEP (Wired Equivalent Privacy) is included. Key sizes of 64 bit and 128 bit are supported.
- **WPA-PSK Support:** WPA-PSK_TKIP and WAP-PSK_AES encryption are supported.
- **Wireless MAC Access Control:** The Wireless Access Control feature can check the MAC address (hardware address) of wireless stations to ensure that only trusted wireless stations can access your LAN.

Applications

Peer-to-Peer Network Connection

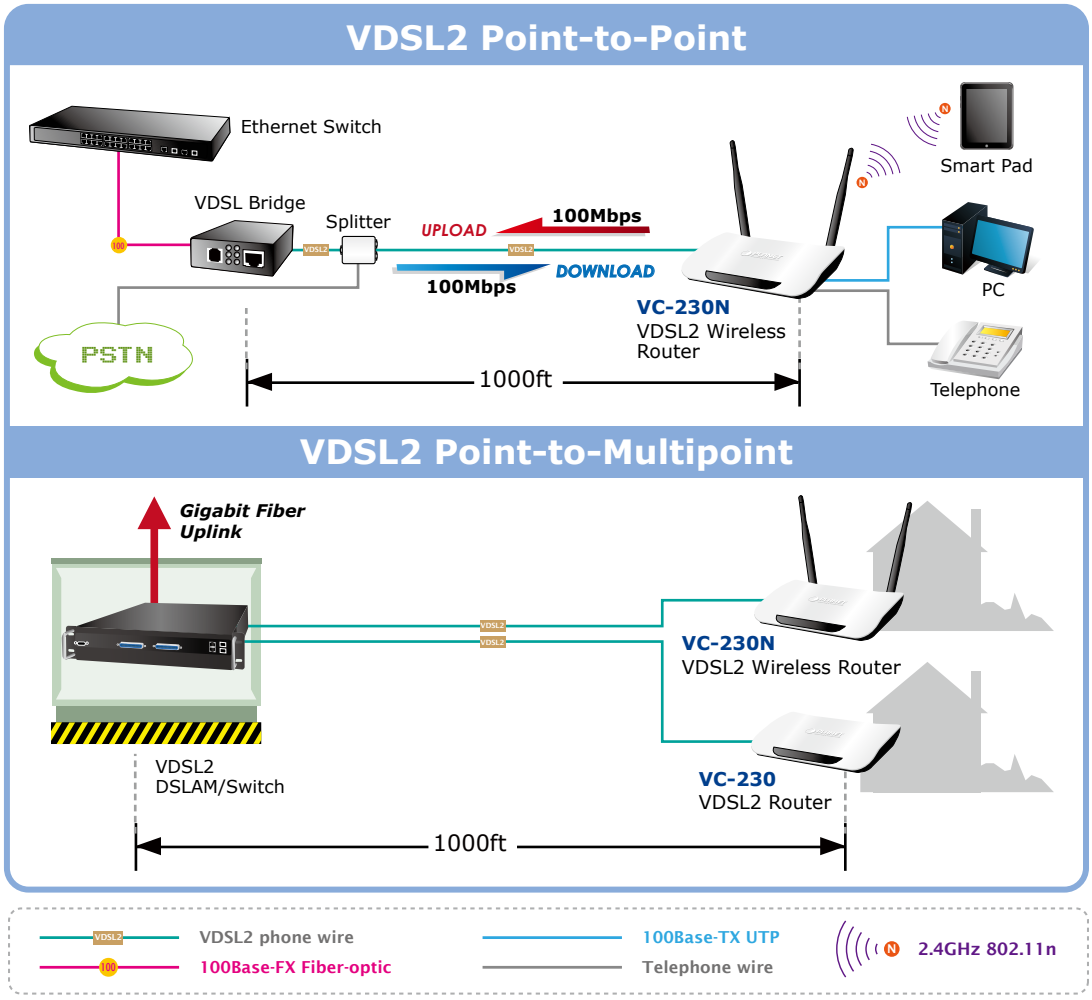
A pair of two VC-230N (or VC-230) can act as a standalone pair for Ethernet distance extension over existing telephone wires. With just one pair of AWG-24 copper wire, you can easily connect two Ethernet networks together with the data rate of maximum 100/100Mbps. Telephone service can still be used while the modems are in operation.

Very High-Speed Internet Connection with Wired / Wireless Type

The VC-230N is the perfect solution for a small group of PCs accessing very high-speed broadband Internet connection simultaneously. With VDSL 2 standard network deployment, it supports downstream and upstream rates both up to 100 Mbps.

Compliant with IEEE 802.11n technology, the VC-230N provides better wireless signal, and higher data rate and performance than 802.11g compliant routers. Furthermore, the VC-230N features the latest security and firewall functions to prevent unauthorized access or invasion. By just clicking the Wizard and setting up step by step, you can easily get in the wireless network and enjoy high speed Internet transmission in your home or office.

The VC-230N also incorporates a 4-port 10/100Base-TX switching hub to enable to easily create or extend your LAN and prevent the attacks from the internet.



Specifications

Model		VC-230N
Hardware		
Interface	LAN	4 x 10/100Base-TX, Auto-Negotiation, Auto MDI/MDI-X RJ45 port
	VDSL2 WAN	1 x RJ-11
	PHONE	1 x RJ-11, and built-in splitter for POTS connection
	Wireless	2x 5dBi detachable antenna
LED Indicators		PWR, DSL, LAN1-4, WLAN, WPS, Security
Button		1 x RESET button 1 x WPS button
Material		Plastic
Dimensions (W x D x H)		186 x 143 x 35 mm
Power		12V DC, 1A
Router Features		
Internet Connection Type		Shares data and Internet access for users, supporting the following internet accesses: ■ PPPoE ■ Dynamic IP ■ Static IP ■ PPTP ■ L2TP
Max. Session		15000
VDSL2 Functionality		CO / CPE mode selection Selectable fast and interleaved mode Selectable VDSL2 Profiles Bandwidth Limitation support
Protocol / Feature		Router, Bridge and WISP mode WDS and WPS DMZ and Virtual Server 802.1D QoS DHCP Server / Client IGMP Proxy and DNS Proxy UPnP and DDNS
Routing Protocol		Static Routing RIPv1/2
VPN		VPN Pass-through
Security		Built-in NAT Firewall MAC / IP/ Port Filtering Content Filtering SPI Firewall support
System Management		Web-based (HTTP) configuration SNTP time synchronize System Log supports Remote Log Password protection for system management
Wireless Interface Specifications		
Wireless Standard		IEEE 802.11b, g and 802.11n
Frequency Band		2.4 to 2.4835GHz (Industrial Scientific Medical Band)
Modulation Type		DBPSK, DQPSK, QPSK, CCK and OFDM (BPSK/QPSK/16-QAM/ 64-QAM)
Data Transmission Rates		802.11n(40MHz): 270/243/216/162/108/81/54/27Mbps 135/121.5/108/81/54/40.5/27/13.5Mbps (Dynamic) 802.11n(20MHz): 130/117/104/78/52/39/26/13Mbps 65/58.5/52/39/26/19.5/13/6.5Mbps (Dynamic) 802.11g: 54/48/36/24/18/12/9/6Mbps (Dynamic) 802.11b: 11/5.5/2/1Mbps (Dynamic)
Channel		Maximum 14 channels, depending on regulatory authorities
Antenna Connector		2 x 5dBi detachable antenna
Wireless Data Encryption		64/128-bit WEP, WPA-PSK, WPA2-PSK, 802.1x encryption, and WPS PBC

Compatibility	
PLANET VDSL2 CO/CPE	DSLAM VDL-2420MR, VDL-2420MR48 VDSL2 Switch: VC-2400MR, VC-2400MR48, VC-820M VDSL2 CO/CPE bridge and router VC-230, VC-231, VC-234
Standards Conformance	
Standard	VDSL2-DMT Compliant with VDSL2 ITU-T G.993.2 (8a, 8b, 8c, 8d, 12a, 12b, 17a, 30a) G.997 / G.998 Band Plan support Supports up to 100Mbps / 100Mbps for Upstream / Downstream Compliant with IEEE802.3 / 802.3u U0 Band Support (25KHz to 276KHz) Packet Transfer Mode Ethernet in the First Mile(PTM-EFM)
Environment Specifications	
Temperature / Humidity	Operating: 0~50 degrees C, 5%~ 90% (non-condensing), Storage: -20~70 degrees C, 0~95% (non-condensing)
Certification	FCC, CE

Ordering Information

VC-230N	802.11n Wireless VDSL2 Router (4 x RJ45, 1 x VDSL2 / RJ11, 1 x Phone)

Related Products

VC-230	VDSL2 Router (4 x RJ45, 1 x VDSL2 / RJ11, 1 x Phone)
VC-820M	8-Port VDSL2 + 2-Port Giga TP/SFP Combo Managed Switch
VC-2400MR	24-Port VDSL2 + 2-Port Giga TP/SFP Combo Managed Switch / AC Power
VC-2400MR48	24-Port VDSL2 + 2-Port Giga TP/SFP Combo Managed Switch / DC Power
VDL-2420MR	24-Port VDSL2 IP DSLAM / AC Power
VDL-2420MR48	24-Port VDSL2 IP DSLAM / DC Power
VC-231	Ethernet over VDSL2 Converter (1 x RJ45, 1 x VDSL2 / RJ11, 1 x Phone - 17a / 30a)
VC-234	Ethernet over VDSL2 Converter (4 x RJ45, 1 x VDSL2 / RJ11, 1 x Phone - 17a / 30a)

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