

# 802.11n Wireless VDSL2 Router



The PLANET 802.11n Wireless VDSL2 Router, VC-230N, applies 2T2R MIMO antenna technology and provides office and residential users 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.

The VC-230N complies with ITU-T G993.2 standard 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 connect to it without additional cabling. 802.11n Draft 2.0 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 wide space at your office or house.

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

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

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.

## KEY FEATURES

### 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:** On the Internet (WAN port) connection, the VC-230N supports Dynamic IP Address (IP Address is allocated on 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 to 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.

### 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**

- Support 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 Draft 2.0 can be used simultaneously. IEEE 802.11n (Draft 2.0) 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**

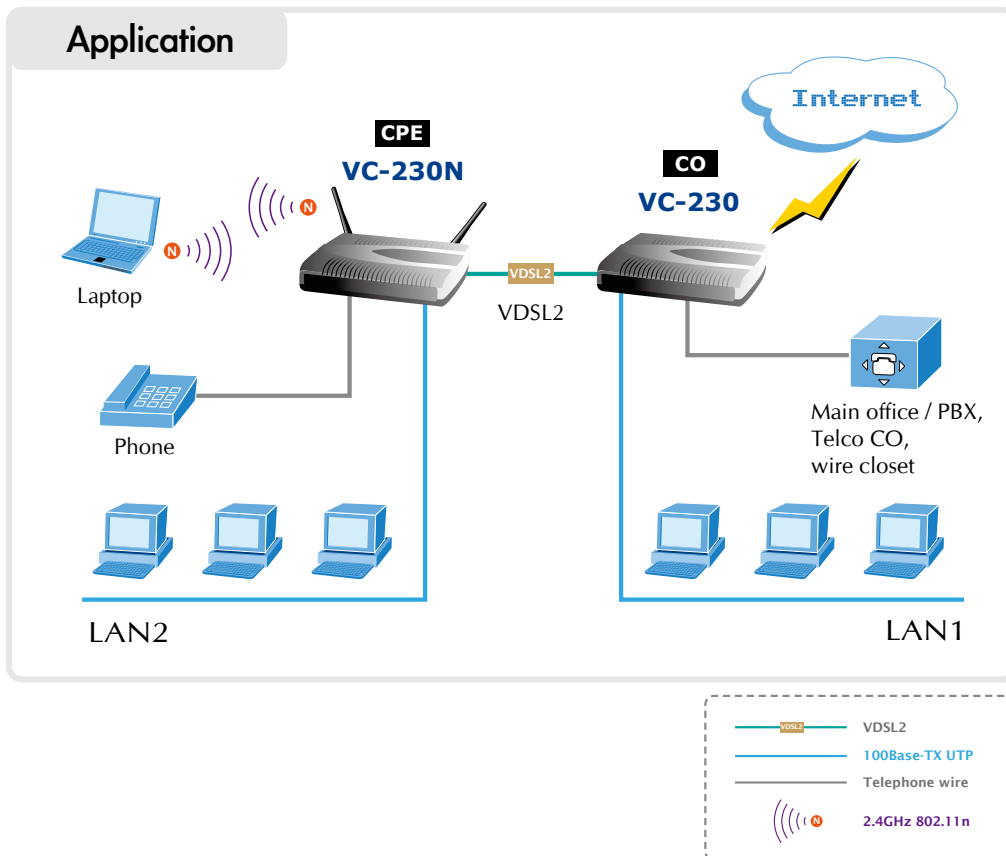
**Peer-to-Peer Network Connection**

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. Meanwhile, telephone service can still be used while the modems are in operation.

**Very High-Speed Internet Connection with Wired / Wireless**

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, 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 setup step by step, then 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 made to easily create or extend your LAN and prevent the attacks from the internet.



**SPECIFICATION**

Product	<b>802.11n Wireless VDSL2 Router</b>	
Model	<b>VC-230N</b>	
<b>Camera Specification</b>		
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 – Up to 100Mbps / 100Mbps for Upstream / Downstream Complaint with IEEE 802.3 / 802.3u U0 Band Support (25KHz to 276KHz) Packet Transfer Mode Ethernet in the First Mile (PTM-EFM)	
Ports	10/100Base-TX	4 x 10/100Base-TX, Auto-Negotiation, Auto MDI/MDI-X
	Wireless	1 x 802.11b/g/n Access Point, 2 x antennas detachable
	PHONE	1 x RJ-11, and built-in splitter for POTS connection
	VDSL2	1 x RJ-11
LED Indicators	PWR, WPS, WLAN, Security, DSL, LAN1-4	
Button	1 x RESET button	
Wireless Standard	IEEE 802.11b, g and 802.11n Draft 2.0	
Frequency	2.4 to 2.4835GHz (Industrial Scientific Medical Band )	
Channels	Maximum 14 Channels, depending on regulatory authorities	
Antenna Connector	2 x 2dBi detachable Antenna	
Wireless Data Encryption	64 bit / 128 bit WEP, WPA-PSK, WPA, WPA2, 802.1x encryption, and WPS PBC	
Wireless Data Rate	IEEE 802.11b: 1/2/5.5/11Mbps	
	IEEE 802.11g: 6/9/12/18/24/36/48/54Mbps	
	IEEE 802.11n: 14/29/43/58/87/116/130/144Mbps in 20MHz, 30/60/90/120/180/240/270/300Mbps in 40MHz	
<b>Software</b>		
Max. Sessions	4096	
VDSL2 Functionality	CO / CPE mode select Selectable fast and interleaved mode Selectable VDSL2 Profiles Bandwidth Limitation support	
Protocol / Feature	Router, Bridge and WISP mode WDS and WPS Static Routing and RIPv1/2 DMZ and Virtual Server 802.1D QoS SNTP DHCP Server / Client IGMP Proxy and DNS Proxy UPnP and DDNS SNMP v1/v2c * TR-069 *	
VPN	VPN Pass-Through	
Security	Built-in NAT Firewall MAC / IP/ Port Filtering Content Filtering SPI Firewall support Password protection for system management	
Management	Web-based configuration	
<b>Environment Specification</b>		
Dimension (W x D x H)	186 x 143 x 35 mm	
Power	12V DC, 1A	
Temperature / Humidity	Operating: 0~50 Degree C, 5~ 90% (non-condensing), Storage: -20~70 Degree C, 0~95% (non-condensing)	
Emission	FCC, CE	

\* Feature Enhance by Future FW upgradeable.

**ORDERING INFORMATION**

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

**RELATED PRODUCT**

**VC-230** VDSL2 Router (4 x RJ45, 1 x VDSL2 / RJ11, 1 x Phone)