

# 802.11n Wireless ADSL 2/2+ Router



PLANET ADN-4100 incorporates 802.11n Wireless capability, ADSL 2/2+ Router and 2T2R MIMO antenna technology to provide office and residential users the ideal solution for sharing a high-speed broadband Internet connection and four 10/100Mbps Fast Ethernet backbone. The ADN-4100 supports up to 24Mbps downstream transmission and up to 3.5Mbps upstream transmission rates. It supports PPPoA (RFC 2364 - PPP over ATM Adaptation Layer 5), RFC 2684 encapsulation over ATM (bridged or routed), PPP over Ethernet (RFC 2516), and IPoA (RFC1483) to establish the connection with ISP.

## Wireless Coverage Plus !

With built-in IEEE 802.11b/g/n wireless network capability, all computers and wireless-enabled network devices can connect to the ADN-4100 without additional cabling. The ADN-4100 is specially equipped with external 5dBi hi-gain antenna providing stronger signal strength and more excellent performance. It enables users to transfer file through up to 300Mbps upload and download data rate.

## Advanced Wireless Security

To secure the wireless communication, the ADN-4100 supports most up-to-date encryption like WEP and WPA-PSK / WPA2-PSK. Moreover, it supports WPS configuration with PBC/PIN type to simplify the security settings. Protected by the advanced wireless security functions, the whole wireless network can be secured.

## Improved Networking Function for Future IP compatibility

Via the user-friendly management interface, the ADN-4100 can be managed by workstations running standard web browsers. The ADN-4100 provides DHCP server, NAT, Virtual Server, DMZ, Access Control, IP Filter, PPTP / IPSec VPN, DDNS, and UPnP capabilities. For further IP compatibility, the ADN-4100 supports IPv6 as well.

## KEY FEATURES

### INTERNET ACCESS FEATURES

#### • Shared Internet Access

All users on the LAN can access the Internet through the ADN-4100 using only a single external IP Address. The local (invalid) IP Addresses are hidden from external sources. This process is called NAT (Network Address Translation).

#### • Built-in ADSL 2/2+ Modem

The ADN-4100 is an ADSL 2/2+ modem supporting all common ADSL connections.

#### • PPPoE, PPPoA, and Direct WAN Connection Support

#### • Multiple PVCs for Triple-Play Service (Data, IPTV, VoIP application)

Cowork with data, IPTV and IP telephony services protocol through specific PVCs at the same time.

#### • Static IP / Dynamic IP Address

On the Internet (WAN port) connection, the ADN-4100 supports both Dynamic IP Address (IP Address is assigned on connection) and Static IP Address.

### ADVANCED INTERNET FUNCTIONS

#### • QoS (Quality of Service)

Divides the capacity between different applications and provides underplayed, continuous data transfer where data packets with higher priorities.

#### • Firewall

Supports simple firewall with NAT technology and provides options of access control from Internet, such as Telnet, FTP, TFTP, HTTP, SNMP, and ICMP services. It also supports IP / MAC / Application / URL filtering.

#### • Port Forwarding (Virtual Server)

Allows Internet users to access to Internet servers on your LAN. The required setup is quick and easy.

#### • DMZ Support

The ADN-4100 can translate public IP addresses to private IP address to allow unrestricted 2-Way communications with Servers or individual users on the Internet. It provides the highest flexibility to run programs which could be incompatible in NAT environment.

#### • Parental Control and Scheduling

The ADN-4100 helps parents to block their children access harmful websites while surfing Internet.

#### • Universal Plug and Play (UPnP)

Allows automatic discovery and configuration of the Broadband Router. UPnP is supported by Windows ME, XP, Win 7, Vista or later.

#### • Dynamic DNS Support

Under the Virtual Servers feature, the ADN-4100 allows users to connect to your LAN Servers by a Domain Name, even if you have a dynamic IP address which changes every time you connect.

#### • VPN Pass through Support

PCs with VPN (Virtual Private Networking) software using PPTP, L2TP, and IPSec are transparently supported - no configuration is required.

- **PPTP and IPsec VPN**

The ADN-4100 supports PPTP and IPsec VPN tunneling. The IPsec VPN has DES, 3DES and AES encryption and SHA-1/MD5 authentication.

- **RIP Routing**

The ADN-4100 supports RIP v1/v2 routing protocol for routing capability.

- **Simple Network Management Protocol (SNMP)**

It is easy for users to remotely manage the router via SNMP.

#### LAN FEATURES

- **4-Port Switch**

The ADN-4100 incorporates a 4-Port 10/100BaseT 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 ADN-4100 can act as a DHCP Server for devices on your local LAN and WLAN.

- **IPv6**

The ADN-4100 implements the new IP version, IPv6 for further compatibility of network environment.

#### WIRELESS FEATURES

- **IEEE 802.11n Standard Compliant**

The ADN-4100 complies with IEEE 802.11n radio with wireless technology capable of up to 300Mbps data rate.

- **Dipole Antenna with MIMO Technology**

The ADN-4100 provides farther coverage, less dead spaces and higher throughput with 2T2R MIMO technology.

- **Supports IEEE 802.11b, 802.11g and 802.11n Wireless Station**

The IEEE 802.11n standard is backward compatible with the 802.11b and 802.11g standards, so 802.11b, 802.11g, and 802.11n can be used simultaneously.

- **WEP (Wired Equivalent Privacy) Support**

Key sizes of 64 Bit and 128 Bit are supported.

- **WPS Push Button Control**

The ADN-4100 supports WPS (Wi-Fi Protected Setup) to easy connect wireless network without configuring the security.

- **WPA-PSK Support**

WPA-PSK\_TKIP and WPA2-PSK\_AES encryption are supported.

- **Wireless MAC Access Control**

It can check the MAC address (hardware address) of Wireless stations to ensure that only trusted Wireless Stations can access to your LAN.

- **WDS**

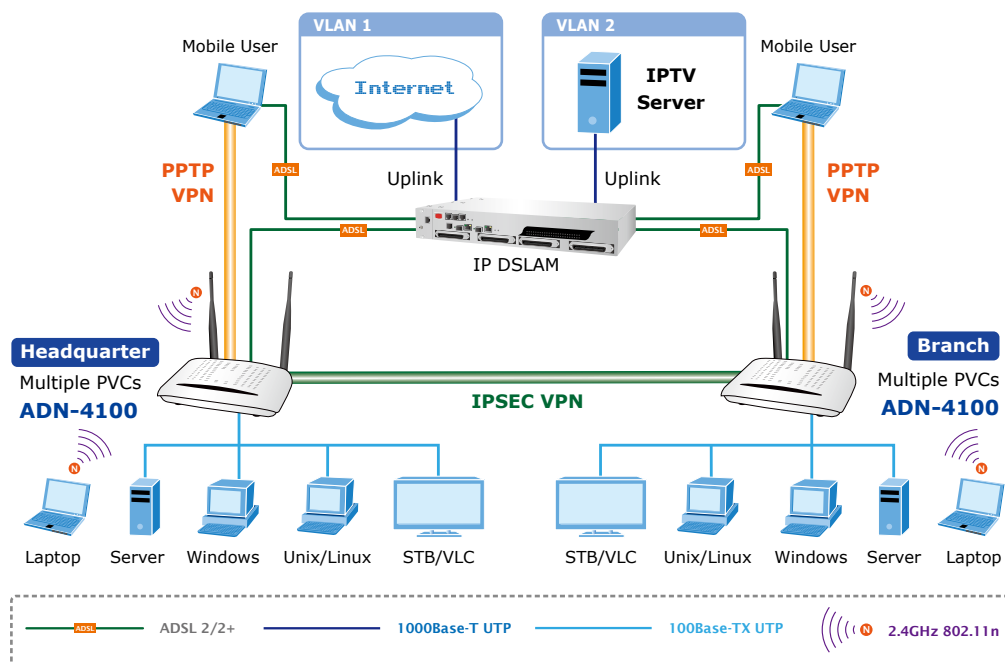
The ADN-4100 supports WDS (Wireless Distribution System) allowing the wireless interconnection of access point in an IEEE 802.11 network.

## APPLICATIONS

### Internet Connection with Wired / Wireless

The ADN-4100 is a perfect solution for a small group of PCs connecting to high-speed broadband Internet. Multi-users can access the Internet simultaneously via the ADN-4100. Providing built-in 802.11n capability, the ADN-4100 enables mobile users to access Internet wirelessly up to 300Mbps high speed.

The ADN-4100 also incorporates a 4-Port 10/100Base-TX switching hub, making it easy to create or extend your LAN and prevent the attacks from the internet.



## SPECIFICATION

Product		802.11n Wireless ADSL 2/2+ 4-Port Router
Model		ADN-4100
Hardware		
Standard	Compliant with ADSL Standard	
	<ul style="list-style-type: none"> <li>- Full-rate ANSI T1.413 Issue 2</li> <li>- G.dmt (ITU G.992.1)</li> <li>- G.lite (ITU G.992.2)</li> <li>- G.hs, Multimode (ITU G.994.1)</li> </ul>	
Standard	Capable of ADSL2 Standard	
	<ul style="list-style-type: none"> <li>- G.dmt.bis (ITU G.992.3)</li> <li>- G.dmt.bisplus (ITU G.992.5)</li> <li>- Reach Extended ADSL (RE ADSL)</li> <li>- Supports Annex A, B, M, L</li> </ul>	
Protocol	RFC 2364 - PPP over ATM (LLC/VCMUX)	
	RFC 2516 - PPP over Ethernet (LLC/VCMUX)	
Protocol	RFC 1483 - Ethernet over ATM (Bridge or Router Mode)	
	RFC 1577 - Classical IP over ATM	
Protocol	RFC 2684 - Bridged IP over ATM (LLC/VCMUX)	
	RFC 2684 - Routed IP over ATM (LLC/VCMUX)	
AAL and ATM Support	Supports up to 8 PVCs	
	ATM Forum UNI 3.1/4.0 PVC	
AAL and ATM Support	VC and LLC Multiplexing	
	Integrated ATM AAL5 support (UBR,CBR,VBR-rt, and VBR-nrt)	
AAL and ATM Support	0~255 VPI plus 1~65535 VCI address range	
	OAM F4 & F5 Segment end-to-end loop-back, AIS, and RDI OAM cells	
Ports	LAN	4 x Ethernet (10/100Mbps, Auto-Negotiation, Auto MDI / MDI-X)
	WLAN	2 x 802.11b/g/n Access Point with one 5dBi dipole antenna
Ports	WAN	1 x RJ-11
LED Indicators		PWR, Link, Data, LAN 1~4, WLAN, WPS
Button		WLAN, Reset, WPS, Power
Max. Concurrent Sessions		2048
Wireless Standard		IEEE 802.11b, 802.11g, 802.11n
Wireless Frequency		2.4 to 2.4835GHz (Industrial Scientific Medical Band )
Wireless Channels	America/ FCC: 2.414~2.462GHz (11 Channels)	
	Europe/ ETSI: 2.412~2.472GHz (13 Channels)	
Wireless Channels	Japan/ TELEC: 2.412~2.484GHz (14 Channels)	
	Wireless Data Encryption	
Wireless Data Rate	64 bit / 128 bit WEP, WPA-PSK / WPA2-PSK, and WPS PBC	
	<ul style="list-style-type: none"> <li>● <b>802.11n (40MHz):</b></li> <li>270/243/216/162/108/81/54/27Mbps</li> <li>135/121.5/108/81/54/40.5/27/13.5Mbps (Dynamic)</li> <li>● <b>802.11n (20MHz):</b></li> <li>130/117/104/78/52/39/26/13Mbps</li> <li>65/58.5/52/39/26/19.5/13/6.5Mbps (Dynamic)</li> <li>● <b>802.11g: 54/48/36/24/18/12/9/6Mbps (Dynamic)</b></li> <li>● <b>802.11b: 11/5.5/2/1Mbps (Dynamic)</b></li> </ul>	
Transmission Distance	Indoor up to 100m	
	Outdoor up to 300m (Depending on the environment)	
Transmit Power	11b mode: 17dBm	
	11g mode: 14dBm	
Transmit Power	11n mode: 14dBm	
	<ul style="list-style-type: none"> <li>270M: -68dBm@10% PER</li> <li>130M: -68dBm@10% PER</li> <li>108M: -68dBm@10% PER</li> <li>54M: -68dBm@10% PER</li> <li>11M: -85dBm@8% PER</li> <li>6M: -88dBm@10% PER</li> <li>1M: -90dBm@8% PER</li> </ul>	
Receiver Sensitivity		

**Software**

<b>Protocols / Features</b>	NAT supports PAT and multimedia applications NAT, Static Routing, and RIPv1/2 Transparent Bridging Dynamic Domain Name System (DDNS) SNTP DNS relay and IGMP proxy DMZ and Virtual Server Quality of Service (QoS) for Traffic Prioritization TR-069 Ready UPnP
<b>VPN</b>	PPTP / IPSec VPN pass through 2 PPTP VPN Tunnel 8 IPSec VPN Tunnel
<b>Security</b>	PPP over PAP (Password Authentication Protocol, RFC1334) PPP over CHAP (Challenge Authentication Protocol, RFC1994) DoS Protection Access Control ACL (Access Control) IP/ MAC / Application / URL Filter Stateful Packet Inspection (SPI) Firewall Password protection for system management
<b>Management</b>	Web-Based configuration Embedded Telnet server for remote and local management Firmware upgrade and configuration data upload/download via WEB SNMP v1/v2c MIB supported Supports DHCP Server/Client/Relay Built-in diagnostic tool TR-069

**Environment Specification**

<b>Dimension (W x D x H)</b>	169 x 118 x 29 mm
<b>Power</b>	12V DC, 0.8A
<b>Operating Environment</b>	Operating temperature: 0 ~ 50 Degree C Storage temperature: -10 ~ 70 Degree C Humidity: 10 ~ 95% non-condensing
<b>Emission</b>	FCC, CE

**ORDERING INFORMATION**

<b>ADN-4100</b>	802.11n Wireless ADSL 2/2+ Router, Annex A
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**RELATED PRODUCTS**

<b>ADE-3400A</b>	ADSL 2/2+ Router
<b>ADE-3410A</b>	ADSL 2/2+ Router with USB port
<b>ADE-4400A</b>	ADSL 2/2+ 4-Port Router
<b>ADN-4101A</b>	802.11n Wireless ADSL 2/2+ 4-Port Router (Annex A)