

# **Product Specification**

150Mbps 802.11n Wireless Broadband Router

# **WNRT-617**

Version 1.0

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Change History:

| Revision    | Date       | Author | Change List           |
|-------------|------------|--------|-----------------------|
| Version 0.9 | 2011/01/24 | Miki   | Draft version release |
| Version 1.0 | 2011/02/04 |        | Initial release       |

| Author       | Miki      | Editor:      | Miki |
|--------------|-----------|--------------|------|
| Reviewed by: | Kent, Jay | Approved by: | Tom  |



## **1. PRODUCT DESCRIPTION**



## **Multiple Wireless Network Technologies for Greater Access**

PLANET Wireless Broadband Router, WNRT-617 features 802.11n radio with 1T1R antenna technology compliant with 802.11b/g/n standards. Compared with general wireless routers, the WNRT-617 offers more powerful and flexible capability for LAN client to access Internet with management functions.

## Wide Range of Wireless Security Support

The WNRT-617 supports one WAN port for wired cable or DSL service connection. To secure the wireless communication, the WNRT-617 supports up-to-date encryption, WPA/WPA2-PSK with TKIP/AES. In order to simplify the security settings, the WNRT-617 supports Wi-Fi Protected Setup(WPS) configuration with PBC/PIN type, by just clicking the options and the secure connection between AP and wireless client will be built immediately.

## **Advanced Firewall Security**

The WNRT-617 supports NAT function to allow multiple users to access Internet via a single legal IP. It also provides Virtual Server for LAN PC to act as an application server and offer certain service to the clients on Internet. Furthermore, the SPI (Stateful Packet Inspection) firewall protects your Intranet PCs from unauthorized accesses and many kinds of DoS attacks from the Internet. In the aspect of firewall, the WNRT-617 supplies IP-based and MAC-based access control, and prevent possible hackers attack.

## Easy Setup

The WNRT-617 provides a total solution for the home and the SOHO users. With the MIMO 11n wireless technology, it's easy to combine the wireless devices with existing wired network.



## 2. PRODUCT FEATURES

## Industrial Compliant Wireless LAN & LAN

- Compliant with IEEE 802.11n wireless technology capable of up to 150Mbps data rate
- Backward compatible with 802.11b/g standard
- Equipped with four LAN ports (10/100Mbps) and one WAN port (10/100Mbps), Auto MDI/MDI-X supported

## Fixed-network Broadband Router

- Supported Internet types: Dynamic IP/ Static IP / PPPoE / Telstra Big Pond / L2TP / PPTP
- Support Static Routing, WDS, UPnP, Dynamic DNS

#### Secure Network Connection

- Support **W**i-Fi **P**rotected **S**etup (WPS)
- Advanced security: 64/128/152-bit WEP, WPA/WPA2 and WPA-PSK/WPA2-PSK(TKIP/AES), 802.1x
- Support NAT firewall features, with SPI function to protect against DoS attacks.
- Support IP / Protocol-based access control and MAC Filtering

## Advanced Networking function for Specific Application

- Support multiple sessions IPSec, L2TP and PPTP VPN pass-through
- Support Virtual Server, ALG, DMZ and UPnP for various networking applications
- Support DHCP Server

#### Easy to install & Management

- Web-based UI for and Quick setup for easy configuration
- Remote Management allows configuration from a remote site
- System status monitoring includes DHCP Client, System Log



## 3. PRODUCT SPECIFICATION

## **3.1 MAIN COMPONENT**

| CPU & Switch :              | Atheros AR7240 |
|-----------------------------|----------------|
| MAC, Broadband & Wireless : | Atheros AR9285 |
| RAM :                       | 32 MB DDR      |
| Flash :                     | 4 MB           |

## **3.2 FUNCTIONAL SPECIFICATIONS**

|                                  | WNRT-617  |  |  |  |
|----------------------------------|---|--|--|--|
| Product                          | 150Mbps 802.11n Wireless Broadband Router                   |  |  |  |
| Hardware Specificatior           |   |  |  |  |
|                                  | WAN Port:   | : 1 x 10/100Mbps Auto MDI/MDI-X RJ45 port        |  |  |
| Interface                        | LAN Port:   | 4 x 10/100Mbps Auto MDI/MDI-X RJ45 port          |  |  |
|                                  | Gain:   | 1 x Fixed 5dBi Antenna                           |  |  |
| Antenna                          | Orientation:  | Omni-directional                                 |  |  |
| Power Button                     | Power On/Off  | button at rear panel                             |  |  |
|                                  | WPS / Reset   | button at front panel                            |  |  |
| WPS / Reset Button               | Push for abov   | ve 5 seconds to reset to factory default setting |  |  |
| LED Indicators                   | PWR, SYS, V   | VLAN, LAN x 4, WAN, WPS with green light         |  |  |
| Material                         | Plastic   |  |  |  |
| Wireless interface Specification |   |  |  |  |
| Standard                         | Compliance with IEEE 802.11b/g/n                            |  |  |  |
| Frequency Band                   | 2.4~2.4835GHz   |  |  |  |
| Extend Frequency                 | DSSS  |  |  |  |
| Modulation Type                  | DBPSK, DQPSK, QPSK, CCK and OFDM (BPSK/QPSK/16-QAM/ 64-QAM) |  |  |  |
|                                  | 11n: 135/121.5/108/81/54/40.5/27/13.5Mbps                   |  |  |  |
| Data Transmission                | 130/117/104/78/52/39/26/13Mbps                              |  |  |  |
| Rates                            | 65/58.5/52/39/26/19.5/13/6.5Mbps (Dynamic)                  |  |  |  |
| Mates                            | 11g: 54/48/36/24/18/12/9/6Mbps (Dynamic)                    |  |  |  |
|                                  | 11b: 11/5.5/2/1Mbps (Dynamic)                               |  |  |  |
| Transmission                     | Indoor up to 100m   |  |  |  |
| Distance                         | outdoor up to 300m (it is limited to the environment)       |  |  |  |
|                                  | America/ FCC: 2.414~2.462GHz (11 Channels)                  |  |  |  |
| Channel                          | Europe/ ETSI: 2.412~2.472GHz (13 Channels)                  |  |  |  |
|                                  | Japan/ TELEC: 2.412~2.484GHz (14 Channels)                  |  |  |  |
|                                  | High: 18 dBm  |  |  |  |
| RF Power                         | Middle: 15 dBm  |  |  |  |
|                                  |   |  |  |  |



|                     | 130M: -68dBm@10% PER  |  |
|---------------------|---|--|
| Receive Sensitivity | 108M: -68dBm@10% PER  |  |
|                     | 54M: -68dBm@10% PER   |  |
|                     | 11M: -85dBm@8% PER  |  |
|                     | 6M: -88dBm@10% PER  |  |
|                     | 1M: -90dBm@8% PER   |  |
| Wireless Management | Features  |  |
| Wireless Operation  |   |  |
| Mode                | AP, WDS (AP+Bridge)   |  |
|                     | WEP (64/128/152-bit) encryption security  |  |
| Encryption Security | WPA-PSK / WPA2-PSK (TKIP/AES)   |  |
| Encryption Security | WPA / WPA2 (TKIP/AES)   |  |
|                     | WPA / WPA2 enterprise mode (802.1x authentication)  |  |
|                     | Provide wireless LAN ACL (Access Control List) filtering                                      |  |
|                     | Wireless MAC address filtering  |  |
| Wireless Security   | Support WPS(WIFI Protected Setup)   |  |
|                     | Enable/Disable SSID Broadcast   |  |
|                     | Support 802.11e WMM (Wi-Fi Multimedia)  |  |
| Wireless Advanced   | Support Wireless Roaming  |  |
|                     | Provide Wireless Statistics   |  |
| Router Features     |   |  |
|                     | Shares data and Internet access for users, supporting following internet access:              |  |
|                     | ■ PPPoE   |  |
|                     | Dynamic IP  |  |
| Internet Connection | Static IP   |  |
| Туре                | Telstra Big Pond  |  |
|                     | ■ PPTP  |  |
|                     | ■ L2TP  |  |
|                     | NAT firewall with SPI (Stateful Packet Inspection)  |  |
|                     | NAT with ALG (Application Layer Gateway)  |  |
| Firewall            | Built-in NAT server supporting Virtual Server, and DMZ  |  |
|                     | Built-in firewall with IP address filtering, Domain Name filtering, and MAC address filtering |  |
|                     | Support ICMP-FLOOD, UDP-FLOOD, TCP-SYN-FLOOD filter, DoS protection                           |  |
| Routing Protocol    | Static Routing  |  |
| VPN Pass-through    | PPTP, L2TP, IPSec   |  |
|                     |   |  |
| LAN                 | Built-in DHCP server supporting static IP address distributing                                |  |
| LAN                 | Built-in DHCP server supporting static IP address distributing Support UPnP, Dynamic DNS      |  |
| LAN                 |   |  |
| LAN                 | Support UPnP, Dynamic DNS   |  |
| LAN                 | Support UPnP, Dynamic DNS<br>Support Flow Statistics  |  |



|                       | Session Number: Max 5210                               |  |
|-----------------------|--|--|
|                       | Web-based (HTTP) management interface                  |  |
|                       | Remote management                                      |  |
| System Management     | SNTP time synchronize                                  |  |
|                       | Easy firmware upgrade                                  |  |
|                       | System Log supports auto mail and save to local host   |  |
|                       | Windows 7(32-bit/64-bit)                               |  |
| OS Compatibility      | Windows Vista (32-bit/64-bit)                          |  |
| OS Compatibility      | Windows XP   |  |
|                       | Mac OS X 10.4 and higher                               |  |
| Standards Conformance | ce   |  |
|                       | IEEE 802.11n (1T1R, up to 150Mbps)                     |  |
|                       | IEEE 802.11g   |  |
|                       | IEEE 802.11b   |  |
| IEEE Standards        | IEEE 802.11i   |  |
|                       | IEEE 802.3 10Base-T                                    |  |
|                       | IEEE 802.3u 100Base-TX                                 |  |
|                       | IEEE 802.3x Flow Control                               |  |
| Others Protocols and  | CSMA/CA, CSMA/CD, TCP/IP, DHCP, ICMP, NAT, PPPoE, SNTP |  |
| Standards             |  |  |

## 3.3 Physical Specification

#### Dimension

174 x 110 x 23 mm (W x D x H)

# Weight 200g



## Front Panel



## WPS/Reset Button

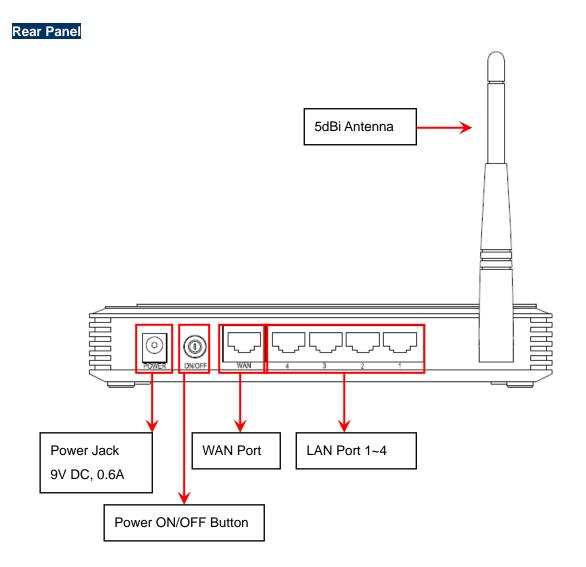
| ACTIVE | ТІМЕ   |
|--------|--|
| WPS    | Press and hold the button less than 5 seconds for WPS configuration          |
| Reset  | Press and hold the button more than 8 seconds to the factory default setting |

## LED definition

|          |         | WAN | WPS | WPS/Reset  |  |
|----------|---------|-----|-----|------------|--|
| WNRT-617 | 1 2 3 4 |     |     | $\bigcirc$ |  |

| LED     | COLOR         | STATE       | FUNCTION   |
|---------|---------------|-------------|--|
| PWR     | Green         | On          | Device power on  |
| FWK     | Green         | Off         | Device power off   |
|         |               | On          | Device is initializing                                   |
| SYS     | Green         | Slow Flash  | The device is working properly                           |
|         |               | Quick Flash | Press and hold the reset button longer than 5 seconds    |
| WLAN    | Green         | Flash       | The Wireless function is enabled.                        |
| WLAN    | Green         | Off         | The Wireless function is disabled.                       |
|         |               | On          | Link is established                                      |
| LAN 1-4 | LAN 1-4 Green | Flash       | Packets are transmitting or receiving                    |
|         |               | Off         | LAN port is not connected                                |
|         |               | On          | Link is established                                      |
| WAN     | Green         | Flash       | Packets are transmitting or receiving                    |
|         |               |             | WAN port is not connected                                |
|         |               | Slow Flash  | A wireless device is connecting to the network by WPS    |
|         |               |             | function. This process will last in the first 2 minutes. |
| WPS     | Groon         | Green On    | A wireless device has been successfully added to the     |
| WFS     | Green         |             | network by WPS function.                                 |
|         |               | Quick Flash | A wireless device failed to be added to the network by   |
|         |               |             | WPS function.  |





## **3.4 Environmental Specification**

#### Temperature

Operating: 0 ~ 40 degree C

Storage: -40 ~ 70 degree C

#### Humidity

Operating: 10 ~ 90% (Non-Condensing)

Storage: 5 ~ 90% (Non-Condensing)

## **3.5 ELECTRICAL SPECIFICATION**

| Input Voltage:     | 9V DC             |   |  |
|--------------------|-------------------|---|--|
| Power Consumption: | 5.2 watts maximum |   |  |
| Power Adapter:     | Power Input       | 100~240V/50-60Hz Switching Power Supply |  |
|                    | Power Output      | 9VDC / 0.6A                             |  |
|                    | Regulator         | CE, RoHS                                |  |



## 3.6 Regulatory Compliance

CE, FCC, Compliant with RoHS

## **3.7 BASIC PACKAGING**

- WNRT-617 x 1
- Power Adapter x 1
- CD (Includes User's Manual) x 1
- Quick Installation Guide x 1
- Ethernet Cable x 1

## 3.8 PACKAGING INFORMATION

Dimension:260 x 180 x 70 mm (W x D x H)Weight:540g (gross weight)20 pcs in one carton