

Product Specification

150Mbps 802.11n Wireless Portable AP / Router

WNRT-300

Version 1.0

This document contains confidential proprietary information and is property of PLANET. The contents of this document should not be disclosed to unauthorized persons without the written consent of PLANET.

Change History:

Revision	Date	Author	Change List
Version 0.9	2011/04/25	Miki	Draft version release
Version 1.0	2011/05/04	Miki	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 Portable Broadband Router, WNRT-300 features 802.11n radio with 1T1R antenna technology compliant with 802.11b/g/n standards. Compared with general wireless routers, the WNRT-300 offers more powerful and flexible capability for Business demands to access Internet with true mobility and range extension of wireless network.

More Flexibility and Mobility

With the tiny-sized and stylish design, the WNRT-300 is easy to carry for the true mobility. It also operates in various environments with the H/W switchable mode selection includes **AP**, **Router**, and **Client**, which can immediately set up a wireless network environment. The WNRT-300 built-in rechargeable lithium battery and power supplied through mini USB port for directly charging via the computer's USB port, thus increasing the convenience even in the condition of no power outlet available for use. The portable characterize and greater flexibility of operation to make it suitable for travelling, moving or outdoor application.

Wide Range of Wireless Security Support

To secure the wireless communication, the WNRT-300 supports up-to-date encryption, WPA/WPA2-PSK with TKIP/AES. In order to simplify the security settings, the WNRT-300 supports Wi-Fi Protected Setup (WPS) configuration with PBC/PIN type. Just one click and the secure connection between AP and wireless client will be built immediately.

Advanced Firewall Security

The WNRT-300 supports NAT function to allow multiple users to access Internet via a single legal IP. It also provides Port Forwarding, DMZ for LAN PC to act as an application server and offer the clients from the Internet certain service. Furthermore, the advanced firewall protects your Intranet PCs from unauthorized accesses and many kinds of DoS attacks from the Internet. In aspect of the firewall, the

WNRT-300 provides IP/ MAC/ Port/ URL filtering, and prevents possible hackers attack.

Easy Setup

The WNRT-300 provides a total solution for home and business users. With the High Speed of 802.11n 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 one 10/100Mbps RJ-45 Ethernet port for LAN/WAN, Auto MDI/MDI-X supported
- **Wireless Network Range Extender**
 - Multiple Wireless Modes: AP, WDS, Repeater, Universal Repeater, Client
 - Support WMM (Wi-Fi Multimedia), Wireless QoS
 - Support IAPP (Inter Access Point Protocol), Wireless Roaming
- **Fixed-network Broadband Router**
 - Supported Internet types: Dynamic IP/ Static IP/ PPPoE/ L2TP/ PPTP
 - Support Static & Dynamic (RIP1 and 2) Routing
 - Support IP / MAC-based Bandwidth Control
 - Support 802.1d STP & IGMP Proxy
- **Secure Network Connection**
 - Advanced security: 64/128-bit WEP, WPA-Enterprise/WPA2-Enterprise and WPA-PSK/WPA2-PSK with TKIP/AES Encryption, 802.1x Authentication
 - Built-in NAT firewall features with Port/ IP/ MAC/ URL Filtering, and DoS protection.
 - Support 802.1Q VLAN
- **Advanced Networking function for Specific Application**
 - Support multiple sessions IPSec, L2TP, PPTP, and IPv6 VPN pass-through
 - Support Port Forwarding, DMZ, UPnP and Dynamic DNS for various networking applications
 - Support DHCP Server
- **Easy to install & Management**
 - Web-based UI and Setup Wizard for easy configuration
 - System status monitoring includes DHCP Client, System Log
- **Flexible usage & Business-oriented design**

- Portable and Pocket-sized design for true mobility
- Hardware switchable operation modes: Router / AP / Client
- One-touch Wi-Fi Protected Setup (WPS)
- Built-in rechargeable Li-ion battery

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

Chipset :	Realtek RTL8196C+RTL8188RE
RAM :	32 MB
Flash :	4 MB

3.2 FUNCTIONAL SPECIFICATIONS

Product	WNRT-300 150Mbps 802.11n Wireless Portable AP / Router	
Hardware Specification		
Interface	LAN/WAN	1 x 10/100Mbps Auto MDI/MDI-X RJ45 port
Antenna	Gain:	1 x Internal 2dBi Antenna
	Orientation:	Omni-directional
Button/Switch	Front panel (from left to right): Mode Selection Switch (Router/Client/AP) WPS Button Power On/Off Switch	
	Rear panel: Reset button *Push for above 5 seconds to reset to factory default settings	
LED Indicators	PWR, WLAN, WAN/LAN, WPS, CHG	
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)	
Data Transmission Rates	11n: Up to 150Mbps (Dynamic)	
	11g: Up to 54Mbps (Dynamic)	
	11b: Up to 11Mbps (Dynamic)	
Transmission Distance	Indoor up to 100m outdoor up to 300m (it is limited to the environment)	

Channel	America/ FCC: 2.412~2.462GHz (11 Channels) Europe/ ETSI: 2.412~2.472GHz (13 Channels) Japan/ TELEC: 2.412~2.484GHz (14 Channels)
Max. RF Power	20 dBm (EIRP)
Receive Sensitivity	135M: -68dBm@10% PER 54M: -68dBm@10% PER 11M: -85dBm@8% PER
Software Features	
Operation Mode	<ul style="list-style-type: none"> ■ AP ■ Router ■ Client (Switchable by H/W)
Wireless Mode	AP, WDS, Repeater (WDS+AP), Universal Repeater (AP+Client)
Encryption Security	WEP (64/128-bit) encryption security WPA-Enterprise / WPA2-Enterprise (TKIP/AES) WPA-Personal / WPA2-Personal (TKIP/AES) 802.1x Authentication
Wireless Security	Provide wireless LAN ACL (Access Control List) filtering
	Wireless MAC address filtering
	Support WPS (Wi-Fi Protected Setup)
	Enable/Disable SSID Broadcast
Wireless Advanced	WMM(Wi-Fi Multimedia): 802.11e Wireless QoS
	IAPP(Inter Access Point Protocol): 802.11f Wireless Roaming
	Provide Wireless Statistics
Internet Connection Type	Shares data and Internet access for users, supporting following internet access: <ul style="list-style-type: none"> ■ PPPoE ■ Dynamic IP ■ Static IP ■ PPTP ■ L2TP
Firewall	NAT firewall with SPI (Stateful Packet Inspection)
	Built-in NAT server supporting Port Forwarding, and DMZ
	Built-in firewall with IP address/ MAC address/ Port/ URL filtering
	Support ICMP-FLOOD, UDP-FLOOD, TCP-SYN-FLOOD filter, DoS protection
	Support 802.1Q VLAN up to 4
Routing Protocol	Static / Dynamic (RIP1 and 2) Routing
VPN Pass-through	PPTP, L2TP, IPSec, IPv6
LAN	Built-in DHCP server supporting static IP address distributing
	Support UPnP, Dynamic DNS
	Support IGMP Proxy

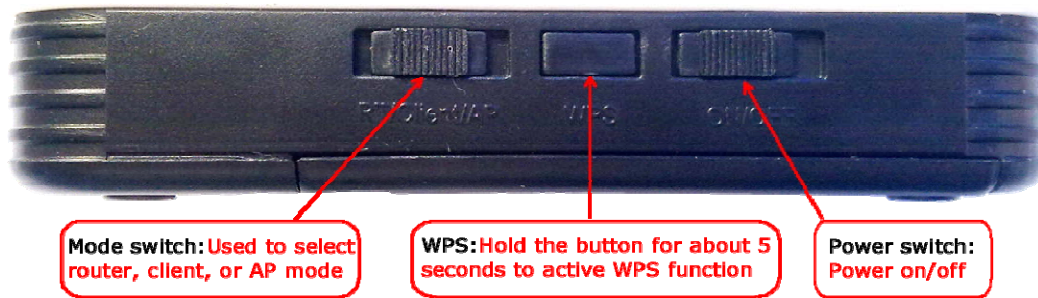
	Support 802.1d STP (Spanning Tree)
	IP / MAC-based Bandwidth Control
System Management	Web-based (HTTP) management interface
	SNTP time synchronize
	Easy firmware upgrade
	System Log supports Remote Log
Standards Conformance	
IEEE Standards	IEEE 802.11n (1T1R, up to 150Mbps)
	IEEE 802.11g
	IEEE 802.11b
	IEEE 802.11i
	IEEE 802.3 10Base-T
	IEEE 802.3u 100Base-TX
	IEEE 802.3x Flow Control
Others Protocols and Standards	CSMA/CA, CSMA/CD, TCP/IP, DHCP, ICMP, NAT, PPPoE, SNTP

3.3 Physical Specification

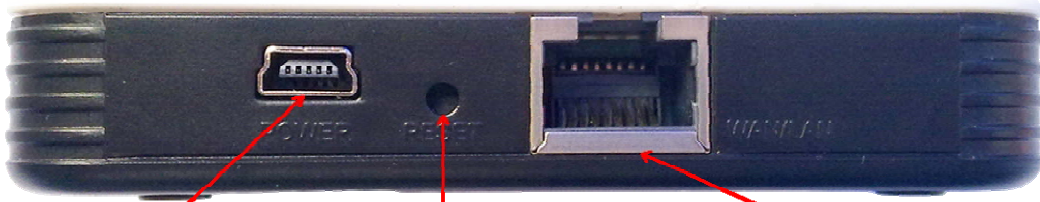
Dimension: 88 x 62 x 18 mm (W x D x H)

Weight: 80g (gross weight)

Front Panel



Rear Panel



POWER:The Power plug is where you will connect the power adapter

RESET:Reset the Router's factory defaults by hold the button pressed down for about five seconds

WAN/LAN:Ethernet ports can be connected with Ethernet router , NIC card and the Cable/DSL Modem

Button/Switch

ACTIVE	TIME
RT/Client/AP	Mode Selection Switch, used to select router, client, or AP mode
WPS	Press and hold the button about 5 seconds for WPS configuration
ON/OFF	Power On/Off Switch
RESET	Press and hold the button about 5 seconds to the factory default setting

LED definition



LED	COLOR	STATE	FUNCTION
PWR	Green	On	Device power on
		Off	Device power off
		Flash	Low battery power
WLAN	Blue	Flash	The Wireless function is enabled.
		Off	The Wireless function is disabled.
WPS	Blue	On	WPS is activated
		Off	WPS is not activated
WAN/LAN	Blue	On	Link is established
		Off	No Ethernet device connected
		Flash	Packets are transmitting or receiving
CHG	Red	On	Charging
		Off	Charging complete/ no external power input

3.4 Environmental Specification

Temperature

Operating: 0 ~ 40 degree C

Storage: -40 ~ 70 degree C

Humidity

Operating: 10 ~ 90% (Non-Condensing)

Storage: 5 ~ 95% (Non-Condensing)

3.5 ELECTRICAL SPECIFICATION

Input Voltage:	5V DC	
Power Adapter:	Power Input	100~240V/50-60Hz Switching Power Supply
	Power Output	5VDC / 1A
	Regulator	CE, FCC

3.6 Regulatory Compliance

CE, FCC

3.7 BASIC PACKAGING

- WNRT-300 x 1
- Power Adapter x 1
- USB Cable x 1
- Ethernet Cable x 1
- 3.7V 1050mAh Li-ion Battery x 1
- CD (Includes User's Manual) x 1
- Quick Installation Guide x 1

3.8 PACKAGING INFORMATION

Dimension: 153 x 94 x 62 mm (W x D x H)

Weight: 210g (gross weight)
40 pcs in one carton