

Product Specification

750Mbps 802.11ac Wireless Broadband Router

WDRT-750AC

Version 1.0

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Change History:

Revision	Date	Author	Change List
Version 1.0	2013/12/12	Solo	Initial Release

Author	Solo	Editor:	Solo
Reviewed by:	Kent	Approved by:	Tom

1. PRODUCT DESCRIPTION



2.4G & 5G Simultaneous Dual Band Wireless Connectivity

Since there are more and more wireless applications and electric devices using the radio frequency of 2.4GHz, the wireless channel of 2.4GHz has been already too crowded for clients to enjoy the high-speed wireless connection. In order to avoid the wireless interference between each other, PLANET WDRT-750AC provides users the radio frequency of 5GHz for watching HD videos or playing online games additionally. At the same time, it enables other users still surf the Internet via the original radio frequency of 2.4 GHz. The WDRT-750AC is just like 2 totally independent Access Points in one device for you.

Multiple Network Technologies for Incredibly 750Mbps High-Speed Connection

The WDRT-750AC supports IEEE 802.11a/b/g/n/ac Dual Band standard technology, therefore it can provide the wireless speed up to 300 + 4330Mbps which is 12 times faster than that of traditional 11g Access Point. Compared with general wireless routers, the WDRT-750AC offers faster transmitting speed and more convenient method to enable or disable wireless signal.

Fully Support of Wireless Security Encryption

To secure the wireless communication, the WDRT-750AC supports up-to-date encryption technology, WPA / WPA2 and WPA-PSK / WPA2-PSK with TKIP/AES. The WDRT-750AC supports Wi-Fi Protected Setup (WPS) configuration with PBC/PIN methods to simplify the wireless security settings. By just clicking the

WPS button, the secure connection between the wireless AP and wireless client will be built immediately.

Powerful Firewall and Complete Access Control Functions

The WDRT-750AC supports NAT function allowing multiple users to access Internet via a single legal IP. It also provides Virtual Server for the specific LAN PC to act as an application server and offer certain service to the clients on the Internet. In addition, the powerful firewall protects your Intranet clients from unauthorized accesses and various kinds of DoS attacks from the Internet. In the aspect of firewall, the WDRT-750AC supplies IP-based and MAC-based access control to prevent possible hackers attack.

Easy Setup for Multiple Wireless Modes

The WDRT-750AC supports multiple wireless modes including AP, and bridge, for different network applications. Furthermore, with the built-in Quick Setup function, users can configure the WDRT-750AC easily and quickly through a couple of simple steps. It is so easy to apply the WDRT-750AC to the existing wired network. The WDRT-750AC definitely provides a total network solution for the home and the SOHO users.

2. PRODUCT FEATURES

- **IEEE Compliant Wireless LAN & Wired LAN**
 - Compliant with IEEE 802.11a/b/g/n/ac dual-band (2.4G&5G) wireless technology capable up to 300+433Mbps data rate
 - Auto MDI/MDI-X supported
- **Fixed-network Broadband Router**
 - Supported WAN connection types: DHCP / Static IP / PPPoE / PPTP / L2TP
 - Supports Dynamic DNS and DHCP Server
- **Secure Network Connection**
 - Supports Wi-Fi Protected Setup (WPS)
 - Advanced security: 64/128-bit WEP, WPA/WPA2 and WPA-PSK/WPA2-PSK (TKIP/AES encryption)
 - Supports NAT firewall, IP / Port / URL-based access control and MAC address Filtering
 - Support Dual-SSID to allow users to access different networks through a single AP
- **Advanced Networking function for Specific Application**
 - Supports Bandwidth Control (QoS) based on different local IP addresses
 - Supports NTP, Virtual Server, UPnP, and DMZ for various networking applications
- **Easy Installation & Management**
 - User Friendly Web-based UI with On-line Help
 - Remote Management allows configuration from a remote site
 - System status monitoring includes DHCP Client List and System Log

3. PRODUCT SPECIFICATION

3.1 MAIN COMPONENT

Chipset	MT7620A+MT7610E
RAM	16 MB
Flash	2 MB

3.2 FUNCTIONAL SPECIFICATIONS

Product	WDRT-750AC 750Mbps 802.11ac Wireless Broadband Router	
Hardware Specification		
Interface	WAN Port:	1 x 10/100 Mbps Auto MDI/MDI-X RJ45 port
	LAN Port:	4 x 10/100 Mbps Auto MDI/MDI-X RJ45 ports (LAN1~4)
Antenna	Gain:	2.4GHz : 2 x 2.5dBi PCB Antenna 5GHz: 1 x 3.8dBi Internal Antenna
	Reset / WPS Button	Reset / WPS button at rear panel Press for about 10 seconds to reset the device to factory default. Press for 1 second to activate WPS function.
LED Indicators	PWR x 1 WLAN (2.4G & 5G) x 2 WAN x 1	
Material	Plastic	
Dimension (W x D x H)	163 x 100 x 43 mm (W x D x H)	
Weight	146g	
Power Requirement	12V DC, 0.5A	
Power Consumption	Maximum of 5 Watts	
Wireless interface Specification		
Standard	Compliance with IEEE 802.11a/b/g/n/ac	
Frequency Band	Simultaneous 2.4 GHz and 5 GHz	
Modulation Type	DSSS(DBPSK/DQPSK/CCK) OFDM(BPSK/QPSK/16QAM/64QAM) MIMO	
Data Rates	2.4GHz 11n: (20MHz): up to 144.4Mbps; (40MHz): up to 300Mbps 11g: 6/9/12/24/36/48/54Mbps 11b: 1/2/5.5/11Mbps	
	5GHz 11a: 6/9/12/24/36/48/54Mbps 11ac: (20MHz):up to 86.7Mbps (40MHz):up to 200Mbps (80MHz):up to 433Mbps	
Channel	2.4GHz America / FCC: 2.412~2.462GHz (11 Channels) Europe / ETSI: 2.412~2.472GHz (13 Channels) Japan / TELEC: 2.412~2.484GHz (14 Channels) 5GHz 5.180-5.240GHz, 5.745-5.825GHz (Up to 9 channels)	

	The actual channels in application will vary depends on the regulation in different regions and countries
Channel Width	20/ 40/80 MHz
RF Power / EIRP	2.4GHz: 11b: 17±1dBm 11g: 14±1.5dBm 11n: 14±1.5dBm 5GHz: 11a: 14±1.5dBm 11n: 14±1.5dBm 11ac: 13±1.5dBm
Receive Sensitivity	2.4GHz 11b (11Mbps): -79dBm 11g (54Mbps): -72dBm 11n (20M)mode: -69dBm 11n (40M)mode: -65dBm 5GHz 11a: -72dBm 11n (20M)mode: -69dBm 11n (40M)mode: -65dBm 11ac (20M)mode: -57dBm 11ac(40M)mode: -54dBm 11ac(80M)mode: -51dBm
Wireless Management Features	
Wireless Modes	<ul style="list-style-type: none"> ■ Gateway ■ Repeater
Encryption Security	WEP (64/128-bit) WPA / WPA2 WPA-PSK/ WPA2-PSK encryption
Wireless Security	Provide Wireless LAN ACL (Access Control List) filtering Wireless MAC address filtering Support WPS (WIFI Protected Setup)
Wireless Advanced	Support Dual-SSID (2.4G & 5G)
Max. Supported Clients	Wire: 254 Wireless: 32
Router Features	
Internet Connection Type	Shares data and Internet access for users, supporting following internet access: <ul style="list-style-type: none"> ■ DHCP ■ Static IP ■ PPPoE ■ PPTP ■ L2TP
Firewall	NAT firewall

	Built-in NAT server which supports Virtual Server, and DMZ
	Built-in firewall with IP address filtering, Port filtering, URL filtering, and MAC address filtering
LAN	Built-in DHCP server supporting static IP address distributing
	Support UPnP, Dynamic DNS
	Support Packets Statistics
	IP-based Bandwidth Control
	Session Number: Max. 1500
System Management	Web-based (HTTP) management interface
	Remote management (WAN Access Control)
	SNTP time synchronize
	System Log
IEEE Standards	IEEE 802.11ac
	IEEE 802.11n
	IEEE 802.11a
	IEEE 802.11g
	IEEE 802.11b
	IEEE 802.11i
	IEEE 802.3 10Base-T
	IEEE 802.3u 100Base-TX
Others Protocols and Standards	CSMA/CA, CSMA/CD, TCP/IP, DHCP, ICMP, NAT, PPPoE, SNTP
OS Compatibility	Windows 7
	Windows Vista
	Windows XP
	Mac OS X 10.4 and higher
Standards Conformance	
Temperature	Operating: 0 ~ 40 Degree C
	Storage: -40 ~ 70 Degree C
Humidity	Operating: 10 ~ 90% (Non-Condensing)
	Storage: 5 ~ 90% (Non-Condensing)
Regulatory	CE, RoHS, WEEE

3.3 Physical Specification

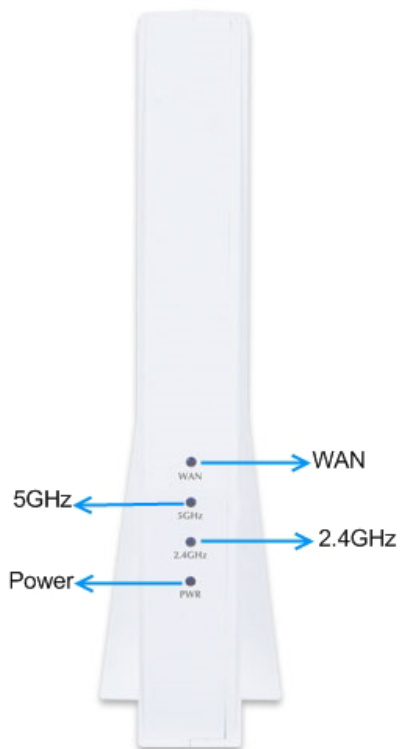
Dimension

163 x 100 x 43 mm (W x D x H)

Weight

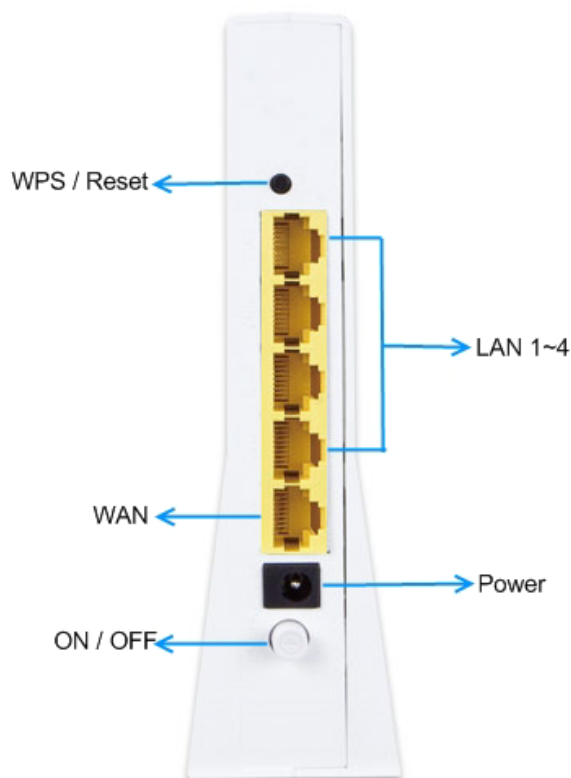
146g

Front Panel



LED (Left to Right)	COLOR	STATE	FUNCTION
PWR	Green	On	Device power on
		Off	Device power off
5G	Green	On	The 5GHz WiFi is activated
		Flash	Device is transmitting data wirelessly over 5GHz
		Off	The 5GHz WiFi is disabled
2.4G	Green	On	The 2.4GHz WiFi is activated
		Flash	Device is transmitting data wirelessly over 2.4GHz
		Off	The 2.4GHz WiFi is disabled
WAN	Green	On	Link is established
		Flash	Packets are transmitting or receiving
		Off	WAN port is not connected

Rear Panel



Button definition

Object	Description
WPS/Reset	<p>Press the Reset button gently for 1 second and then release it. The system starts to WPS connection.</p> <p>Press the Reset button gently for 10 seconds and then release it. The system restores to the factory default settings.</p>

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

Device Input Voltage:	12V DC / 0.5A	
Power Adapter:	Power Input	100~240, 50-60Hz, 0.3A Switching Power Supply
	Power Output	12V DC / 0.5A

3.6 Regulatory Compliance

CE, RoHS, WEEE

3.7 BASIC PACKAGING

- WDRT-750AC x 1
- Power Adapter x 1
- CD (Includes User's Manual) x 1
- Quick Installation Guide x 1
- Ethernet Cable x 1

APPENDIX A: Default Setting

Default IP Address	192.168.1.1
Default Login User Name	admin
Default Login Password	admin
Default SSID	2.4GHz: WDRT-750AC_2.4G
	5GHz: WDRT-750AC_5G
Default Multiple-SSID	Manually
	Manually
Default Country/Region	US
Default Channel	2.4GHz: AutoSelect
	5GHz: AutoSelect
Default DHCP Server	Enable
Default DHCP Range	192.168.1.2~192.168.1.254