

Product Specifications

LTE Router&WLAN

LTE+4 Ethernet Ports +WLAN(802.11n)

Version 1.1



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1 PRODUCT OVERVIEW

1.1 Introduction

LTE router could connect to computer both by 4 Ethernet Ports and Wireless.

It is an ideal device for broadband wireless access. And could support IEEE 802.11b/g/n, Users could enjoy high speed steadily. In security, it supports all of the Wireless Transfers Encrypt Protocol.

It supports voice by integrated LTE module.

It is the best choice of telecommuting, SOHO and family.

1.2 Product Key Feature

1. Support IEEE 802.11b/g/n
2. Strong local network router with features of DHCP, DNS and NAT/NAPT
3. Routing from WAN to LAN
4. Basic Gateway features such as NAT, DHCP, and DNS. Etc, to provide the capability to construct private network.
5. Firewall
6. Support VPN and path through
7. Support 802.1x
8. Support SPI
9. IP filter, IP forwarding, IP QoS
10. Web-based GUI
11. Support LTE

2 HARDWARE ARCHITECTURE

2.1 Hardware Interfaces

- Four RJ-45 ports for 10/100 Base-T Ethernet LAN connection to PC or Ethernet WAN port (configuration by software)
- 2 LTE external main-antenna
- 2x2 Wi-Fi internal antenna
- One Reset button to default setting
- One Power jack
- One Power switch
- One WPS button
- One S(U)IM card slot
- One USB Port. For Upgrade the module software

2.2 Main Chipset Information

Item	Vendor	Model # & Edition
Router CPU	MTK	MTK7620A
LTE CPU	Marvell	PXA1802

2.3 LED Definitions

L able	Display Color	Meaning
Power	Off	Power off or failure
	Light (Green)	Power on, normal operation
LTE Status	Off(Green),Off(Red)	WAN is not in Mobile network mode
	Light(Green),Off(Red)	LTE Good RSSI(131-198)
	Fast Blink(Green), Off(Red)	LTE bad RSSI(100-130)
	Slow Blink(Green), Off(Red)	2G/3G RSSI(1-98)
	Off (Green), Fast Blink (Red)	RSSI unknown or immesurable

L able	Display Color	Meaning
	Off(Green), Light(Red)	Device is not ready
	Off(Green), Slow Blink (Red)	Device is ready and network is not registered
PPP	Off	PPP Connection is down
	Light (Green)	PPP Connection is up
	Blink(Green)	PPP Connection is start to link _up/ link _down but not up/down
	Slow Blink(Green)	PPP Connection is idle (On _Demand mode)
WIFI	Off	WIFI Radio is Off
	Light(Green)	WIFI Radio is on without data transporting
	Blink(Green)	WIFI Radio is on with data transporting
LAN1-4 (OR WAN)	Off	LAN(WAN) port is Off
	Light(Green)	LAN(WAN) port is on without data transporting
	Blink(Green)	LAN(WAN) port is on with data transporting
WPS	Off	WPS is close
	Light(Green)	WPS is OK
USB	Off	No USB Connection
	Light(Green)	USB Port in use

3 SOFTWARE FEATURES

Router provides the following features:

Protocol & Features Supported	
1	RFC 2684 IP Bridging
2	RFC 2684 IP Routing
3	RFC 2516, PPPoE (Point over Ethernet) over
4	Routing: RIP v1, RIP v2
5	Support Static Routing
6	NAT & PAT (RFC 1631)
7	DMZ support
8	NAT with Application Layer Gateway(FTP,TFTP ,L2TP,PPTP,IPSEC...)
9	IP Routing: TCP, UDP, ICMP, ARP
10	DHCP Client/Server for IP management
11	DHCP Relay
12	DHCP option 60/77

13	Pass through/open/redirection and port mapping
14	The Range of private IP support 192.168.1.2 to 192.168.1.254
15	QoS mechanism support for mapping of IP packet content
16	HTTP (web based) for firmware upgrade & configuration
17	IP filtering & raw filtering
18	IGMP Proxy support
19	IEEE 802.1D Spanning tree
20	DNS relay
Firewall Features	
1	Source IP address; Destination IP address; Source port addresses Source MAC address; Destination Port addresses
2	Spiteful packet inspection
3	Filtering on port basis
Virtual private network support	
1	Standard (IPSec, L2TP, PPTP) pass through
2	Compatibility with other IPSec VPN gateways
3	Supports multiple simultaneous login via FTP/www/Telnet
Diagnostic	
1	support diagnostic function
Management features & functionalities	
1	SNMP V2C
2	Remote upgrade
3	TFTP/FTP upgrade
4	Telnet remote access support
5	support Web based configuration
6	Support for backup & restore configuration to/from PC
7	Support TR-64 for LAN management
8	Support DHCP server for IP management
9	SNTP
General Specification & Operational requirement	

1	Support in Windows 98, Windows 2000, Windows XP, Windows Vista, Windows 7&8, Linux, Apple and Mac OS for Ethernet
2	System Log
3	Password & user ID may have special character
4	IPV4
Applicable for 1 port WiFi Modem	
1	Wireless Standard and feature - 802.11g/802.11b/802.11n
2	64/128 bit WEP support
3	MAC association control
4	WPA with pre shared keys
5	Support Multiple SSIDs (please specify)
6	Dynamic WEP Key
7	Support for WPA,WPA2, WPA PSK, TKIP
8	Support 802.1X

4 SPECIFICATIONS AND STANDARDS

4.1 Mechanical

The Mercury has the following properties:

Dimension: 142mm*98mm*20mm

4.2 Electrical

4.2.1 LTE Specification

Item	Description
Platform and Chipset	
Baseband Chipset	Marvell PXA1802
Hardware Specifications	
Working Frequency	<ul style="list-style-type: none"> • LTE-FDD Band 1/3/7/8/20 (2100/1800/2600/900/800MHz) • LTE-TDD Band 38/39/40/41(2600/1900/2300/2500MHz) • HSPA+/UMTS/WCDMA Band 1/2/8 (2100/1900/900MHz) • TDSCDMA: B34/B39

Network Support	TE-FDD Band 1/3/7/8/20 (2100/1800/2600/900/800MHz) LTE-TDD Band 38/39/40/41(2600/1900/2300/2500MHz) HSPA+/UMTS/WCDMA Band 1/2/8 (2100/1900/900/MHz) TDSCDMA: B34/B39
Software Specifications	
Date Service	LTE FDD DL150Mbps / UL50Mbps LTE TDD DL150Mbps / UL50Mbps HSPA+/UMTS/WCDMA DL 21.6Mbps / UL 5.76Mbps TD SCDMA DL 2.8Mbps UL 2.2Mbps

4.2.2 Power Requirements:

Uses an AC adaptor that can supply DC voltages.

AC power adaptor: 100VAC-240VAC

DC voltage: 12V,1A

4.2.3 Heat & Power Dissipation

Power: < 6W(*is changeable)

4.3 Environmental

Complies with the following standards:

- Temperature:
 - -10 to 40 degrees C (Standard Operating)
 - -20 to 70 degree C (Non-operating)
- Humidity:
 - 10% to 90% (Non-condensing, Standard Operating)
 - 5% to 95% (Non-condensing, Non-operating)
- Vibration: IEC 68-2-36, IEC 68-2-6
- Shock: IEC 68-2-29
- Drop: IEC 68-2-3