

R103 4G CPE

1, Product Introduction

R103 is 802.11b/g/n wireless broadband 3G/4G router with perfect all-in-one network solution, users can connect and shared the high rate of 3G/4G or cable/xDSL broadband Internet connection. This multifunctional router integrates three 10/100 Mbps ethernet LAN ports and one 10/100 Mbps of WAN port, as well as the transfer rate of up to 300Mbps, and support NAT firewall of SPI, intelligent traffic control technology and user friendly management interface based on WebUI. It can provide enough bandwidth for the application of the high bandwidth requirements, can watch online video at the same time, to listen digital music, playing online games, transferring large files, VoIP calls and surf the web site.





2、Product Overview

R104 use the latest generation of 40 micron technology SOC chip, a 580 MHZ MIPS cpu core, built-in 64k byte I-cache and 32k byte D-cache and HT 11n MAC/BBP, RF support 2.4 GHz 2T2R MIMO wireless transceiver unit.

Features:

- Built-in 3G/4G modem
- In accordance with the IEEE 802.11 g, IEEE 802.11 b, IEEE802.11 n draft v2.0, IEEE 802.3 and the standard of the IEEE 802.3 u
- Support CSMA/CA, CSMA/CD, TCP/IP, PPPoE, DHCP, ICMP, NAT protocol

- Provide one 10/100M Ethernet interface (WAN), can connect ADSL or Ethernet

switch/router

- Provide two 10/100 Ethernet (LAN) interface, for the internal LAN connection
- Support port automatically turning (Auto MDI/MDIX)
- Support 64/128 bit WEP encryption, Support the WPA, WPA2, IEEE 802.11 I, TKIP

encryption and security mechanism

- Support SSID broadcasting control and access control based on MAC address
- Built-in DHCP server, and static address allocation
- Built-in SPI NAT firewall, support the PING, broadcast, multicast packet filtering and MAC

address, IP address, URL, and the content of the domain name filtering

- Support static routing
- Support virtual server, the DMZ host
- Support to prevent the DoS attack, with functions of automatic virus isolation
- Second-ranking supports universal plug and play (UPnP), DDNS function
- MAC address modification and cloning
- Support remote and Web management
- Provide manual reset button to restore factory default settings.

3、Specification:

Hardware Feature	
CPU	MT7628NN
Modem	ZX297520V3
Memery	SDRAM: 64M Bytes Nor Flash: 8M Bytes
Power supply	Power Jack,DC 12V/1A
WAN	1 x WAN RJ-45 port(10BaseT/100BaseTX with Auto-MDIX IEEE 802.3/802.3u)

LAN	2 x LAN RJ-45 port (10BaseT/100BaseTX with Auto-MDIX IEEE 802.3/802.3u)
WPS key	WPS pair key (short press 3 seconds)
RESET key	Using for restore factory default settings.(multiplex with WPS key, long press 8 seconds)
LED indicator	1 Power indicator 2 System indicator 3 Modem indicator: 3G with blue, 4G with green. 4 WIFI indicator 5 WAN indicator 6 LAN1 indicator 7 LAN2 indicator
SIM card	Support Micro and NANO card
Antenna	4x antenna built-in
Wireless datasheet	
Work Frequency	FCC: 2412-2462MHz(Ch1-Ch11) ETSI: 2412-2472MHz(Ch1-Ch13)
Transfer rate	11n: 270/243/216/162/108/81/54/27Mbps 135/121.5/108/81/54/40.5/27/13.5Mbps 130/117/104/78/52/39/26/13Mbps 65/58.5/52/39/26/19.5/13/6.5Mbps
	11g: 54/48/36/24/18/12/9/6M (self-adaption)
	11b: 11/5.5/2/1M (self-adaption)
Work channel	13x, Auto-selection or manually
Spread-spectrum	DSSS
Data modulation	BPSK, QPSK, CCK and OFDM (BPSK/QPSK/16-QAM/ 64-QAM)
Rx Sensitivity@PER	270M: -61dBm@10% PER; 130M: -61dBm@10% PER; 108M: -61dBm@10% PER; 54M: -65dBm@10% PER; 11M: -85dBm@8% PER; 6M: -88dBm@10% PER; 1M: -90dBm@8% PER
Transfer distance	Indoor 30 meters as far as ; outdoor as far as 50 meters (owing to the different environment)
Tx Power	11n: 15±1.0dBm; 11g: 16±1.0dBm; 11b: 19±1.0dBm (typical)
Frequency	(decided by 4G module) FDD-LTE : BAND1/3/5/7/8 TD-LTE : BAND38/39/40/41 TD-SCDMA: BAND34/39 WCDMA : BAND1/8 (Band customizable)
Transfer rate	(decided by 4G module) TDD-LTE: 150Mbps DL / 50Mbps UL TD-SCDMA: 2.8Mbps DL / 2.2Mbps UL EDGE class 12: 237kbps DL / 237kbps UL GPRS class 12: 85.6kbps DL / 85.6kbps UL

Software Feature	
IP address	Static or DHCP
MAX. end users number	32
Router protocol	Static router, RIP1/RIP2
Management UI	Based WebUI(HTTP)
DHCP	Support Server and Client
Firewall	Built-in NAT Firewall
Network Protocol	TCP/IP, PPPoE、DHCP、ICMP、NAT、NAPT、ARP、PPP、PAP、CHAP、PPTP
ENVIRONMENT & PHYSICAL	
Temperature range	-10 to 50 °C operation; -20 to 70 °C storage
Humidity(non-condensing)	15% - 95% typical
Size	90mm*90mm*78mm