



RUT523, RUT525, RUT535 and RUT538 WiMAX Routers

RUT523, RUT525, RUT535 and RUT538 are compact WiMAX routers with high speed wireless and Ethernet connections. Compliant with IEEE802.16e-2005 WiMAX Wave 2 standard it supports mobile wireless connectivity. Router implements dual independent transmit chain with advanced 2Tx closed-loop diversity (2T-CLD) algorithm, for significantly increased link budget, improved cell coverage, and superior mobile performance. Router supports latest IEEE802.11n as well as IEEE802.11b/g standards and provides wireless receiving and transmitting rate up to 150 Mbps.

This router is ideal for people who'd like to share their internet on the go, as it is not restricted by a cumbersome cable connection. Unrestricted, but not forgotten: the router still supports internet distribution via a broadband cable, simply plug it in to the wan port, set the router to a correct mode and you're ready to browse.

Key Features:

WiMAX

- IEEE 802.16e-2005 Compliant (Mobile WiMAX)
- WiMAX Wave 2 Compliant
- Operates within 2.5 GHz or 3.5 GHz WiMAX networks
- 2 Tx with Closed Loop Diversity
- HARQ Category 7 (up to 40 Mbps UL and DL combined throughput)
- MIMO Matrix A and B for Improved Transmission Speed and Coverage

Router

- Complies with IEEE 802.11n, IEEE 802.11g, IEEE 802.11b wireless standards
- Over 3 times transmission distance of 11G products
- Complies with IEEE 802.3 and IEEE 802.3u standards
- Four Ethernet ports
- Durable aluminum housing
- Integrated OpenVPN and Dynamic DNS

Specifications:

LAN and Wi-Fi:

- Wireless AP, Router, 4-Port Switch and Firewall in one device
- High performance 320 MHz CPU with 256 Mbits SDRAM
- IEEE 802.11b/g/n, IEEE 802.3, IEEE 802.3u standards
- 64/128-bit WEP, WPA, WPA2, WPA&WPA2 encryption methods
- 4x10/100Mbps Ethernet LAN ports (configurable as 3xLAN + 1xWAN)
- Supports Auto MDI/MDIX
- Remote/local Web management
- 1x 5dBi wireless antenna
- WMM (Wireless MultiMedia)
- Wireless Roaming technology for high-efficient wireless connections
- SSID stealth mode and access control based over MAC address
- System log to record the status of the Router
- Auto negotiation/manual mode for IEEE 802.11b/g/n
- Dynamic DNS
- LAN access control over Internet connection
- SNTP
- Virtual server and DMZ host support
- Auto wireless channel selection
- OpenVPN
- 1x Power LED, 4x LAN status LEDs
- Firefox 1.0 and IE5.5 or above support



WiMAX

- **Standard Compliant** IEEE 802.16e-2005
- **Air Interface** S-OFDMA
- **Frequency Band** 2.3 – 2.4GHz (RUT523), 2.5 – 2.7GHz (RUT525), 3.3 – 3.6GHz (RUT535) or 3.3 – 3.8GHz (RUT538)
- **Channel Bandwidth** 3 MHz, 3.5 MHz, 5 MHz, 6 MHz, 7 MHz, 8.75 MHz and 10 MHz
- **Modulation** Adaptive QPSK, 16QAM, 64QAM
- **MIMO** MRC, Matrix A + MRC, Matrix B
- **Beamforming** All I/O Beamforming Items
- **RF Output Power** 2x25 dBm @ 2.3-2.7GHz; 2x23dBm @ 3.3-3.8GHz
- **RX Sensitivity:**
 - QPSK1/2: -99.5 @ 2.5 GHz, 10 MHz BW
 - 16QAM1/2: -94.29 @ 2.5 GHz, 10 MHz BW
 - QPSK1/2: -99 @ 3.5 GHz, 10 MHz BW
 - 16QAM1/2: -93.8 @ 3.5 GHz, 10 MHz BW
- **Antenna Gain** 5 dBi
- **Antenna Type** External omnidirectional
- **Handover** Hard / Optimized Handover
- **QoS Mechanism** UGS, Real-Time-VR, Non Real-Time-VR, Best Effort, ERT-VR
- **Authentication** EAP-TLS, EAP-TTLS-MSCHAPv2
- **Encryption** 3 CCM-Mode 128-bit AES
- **Error Handling** HARQ UL and DL, up to Category 7
- **Throughput** 40 Mbps Total DL + UL
- **LEDs** WiMAX connection status LED

Electrical, Mechanical & Environmental:

Dimensions (H x W x D)	100mm x 85mm x 36mm
Weight	260g
Power Supply	100 – 240 VAC -> 9 VDC wall adapter (allowed range: 8 -18VDC)
Power Consumption	< 7W
Antenna connectors	2 x RP-SMA for WiMAX, 1 x RP-SMA for WiFi
Indicators	4 x Ethernet LEDs, 1 x Power LED, 1 x WiMAX LED
Operating Temperature	0° to 50° C
Storage temperature	-20° to 70° C
Operating Humidity	10% to 90% Non-condensing
Storage humidity	5% to 95% Non-condensing