

PRODUCT INTRODUCTION



The R8 Cellular Router designed for establishing Wi-Fi network and share cellular broad band Internet connection. The R8 Cellular Router enables users to quickly create a secure Wi-Fi (802.11 b/g/n) network and provide access to the Internet using a cellular network. By connect to 3G network; an Internet connection can be accessed and shared virtually anywhere within a wireless

broadband network.

FORWELL WIRELESS mobile Communication products have been widely used for many application in over 20 countries over the world, such as electric power, oil field, coal mine safety, weather forecast, and environment protection, hydrology, heating pipe line, gas pipe line, street lamp control, telecommunications, post, bank and many other fields.

APPLICATION

Access Private Networks

With The R8 Cellular Router, government employees or corporate users can create a wireless network and provide colleagues with remote access to their secure private networks. It is ideal for off-site situations, such as crime scenes, where sharing information is critical.

Special Events

Share the Internet while working at special events. Whether you are at an industry convention, off-site meeting, sporting event, or backstage at a concert, The R8 Cellular Router can keep your personnel and guests in touch with the world.

Internet Access for Commuters

By installing the 3G Cellular Router on a bus, train, or even a boat, you can allow passengers to check e-mail or chat online while commuting. Enhance their experience and increase the value of your services offered with the 3G Mobile Router.

Emergency Response

Whether you are providing relief for a natural disaster or coordinating the rescue of a lost hiker, you can quickly set up a wireless network and allow your team members to access e-mail, go online, and share important files.

For the Road

The R8 Cellular Router lets you share a mobile Internet connection with your group when you are on-the-go for work or play. Stay on top of e-mails, chat with friends and family, get directions, read news, download music, or shop online.

Fixed Broadband Solution

The R8 Cellular Router can be used as a fixed broadband Internet solution in homes or offices that do not have a cable or DSL service available, but are within a compatible mobile wireless network. Conversely, if you are already subscribing to a mobile Internet service, you can simply use the 3G Mobile Router in your home instead of paying extra for a wired high-speed Internet connection.

BENEFITS AND FEATURES

Advanced Network Security

The R8 Cellular Router creates a secure Wi-Fi network by supporting the latest wireless security features to prevent unauthorized access. Support for WEP, WPA, and WPA2 ensure that you will be able to secure your Wi-Fi network, regardless of your client devices. In addition, the 3G Cellular Router utilizes dual active firewalls (SPI and NAT) to prevent potential attacks from across the Internet.

Easy to install and use

The R8 Cellular Router sets up in minutes, making it easy to use while on-the-go. Remaining backward compatible with 802.11b/g/n devices, this router ensures that it will work with legacy wireless equipment you already own. This eliminates incurring additional expenses associated with upgrading your



current wireless equipment. You can also directly connect Ethernet-based devices to its built-in 1-port full-duplex 10/100 switch.

Set up a wireless network with The R8 Cellular Router and provide your users with a secure, high-speed connection to the Internet virtually anywhere within a wireless broadband network.

SPECIFICATION

3G		
Compatible Mobile Networks	R86	IS-95A/B IS-2000 Release 0 CDMA 2000 1x EV-DO Rev.A
	R87	HSDPA/UMTS/EDGE/GPRS/GSM
	R88	GSM/GPRS/EDGE/TD-SCDMA/TD-HSDPA
	R89	HSUPA/HSDPA/UMTS/EDGE/GPRS/GSM
Cellular Frequency band	R86	800Mhz or 800/1900Mhz or 450Mhz band A(optional)
	R87	Triple-band HSPA/UMTS 850/1900/2100 MHz Quad-band EDGE/GPRS/GSM 850/900/1800/1900 MHz
	R88	TD-HSDPA/TD-SCDMA 2010 - 2025 MHz TD-HSDPA/TD-SCDMA 1880 - 1920 MHz GSM/GPRS/EDGE 900/1800 MHz
	R89	Triple-band HSPA/UMTS 850/1900/2100 MHz Quad-band EDGE/GPRS/GSM 850/900/1800/1900 MHz
Bandwidth	R86	UL/DL: 1.8Mbps/3.1Mbps
	R87	UL/DL: 384kbps/7.2Mbps
	R88	TD-HSDPA: up to 2.8 Mbit/s TD-SCDMA: up to 384 kbps EDGE: up to 236.8 kbps GPRS: up to 85.6 kbps
	R89	GSM CS: UL 9.6kbps/DL 9.6kbps GPRS/EDGE: Multi-slot Class 12, Class B WCDMA CS: UL 64kbps/DL 64kbps WCDMA PS: UL 384kbps/DL 384kbps UL/DL HSUPA: UL 2.0Mbps(can be updated to 5.76M)/DL 7.2Mbps
WIFI		
Standard	Support IEEE 802.11 b/g/n wireless operation standard	
Frequency Band	2.4GHz (ISM Frequency Bands)	
Compliant to	802.11b Data Rate - 11, 5.5, 2, 1 Mbps (DSSS/CCK) or 802.11g Data Rate - 54, 48, 36, 24, 18, 12, 9, 6 Mbps (OFDM)	

	802.11n Data Rate – 150, 54, 48, 36, 24, 18, 12, 9, 6 Mbps
Coverage	Support distance up to 100m (328ft) for LOS (Line Of Sight) Coverage.
WIFI Channel	Wireless automatic channel selection
Security	64/128-bit WEP (Wired Equivalent Privacy)
	WPA & WPA-PSK & WPA2 -PSK (Wi-Fi Protected Access)
Features	
Advanced Firewall	Network Address Translation (NAT)
Features	Stateful Packet Inspection (SPI)
Media Access Control	CSMA/CA with ACK
VPN	IPSec
	VPN Pass-through
	PPTP
	L2TP
M2M	TCP/UDP supported
	Serial Port speed from 2400bps to 115200bps, Half-duplex
	Multi-server supported
	Remote SMS/Voice wake-up
	max 4KB data buffer
	Keepalive function
	Always on line/on demand function
Heart beat function	
DHCP	Build-in DHCP (Dynamic Host Configuration Protocol)
DNS	supported
PPP authentication	PAP/CHAP
DDNS	supported
GPS	supported(OPTIONAL)
Hardware	
CPU platform	Ralink 3050
Flash/RAM	4M/32M or 8M/32M
Interface	
WAN	1X10/100M (RJ45 interface)
LAN	4X10/100M (RJ45 interface)
Antenna	1X antenna for Wi-Fi (SMA interface)
	1X antenna for 3G (50Ω SMA female interface)
Antenna gain	3db
Led	§ Power
	§ SYS
	§ LAN (10/100M) X 4
	§ WAN
	§ WLAN
	§ 3G

UIM/SIM	1.8V/3V
Button	WPS
	Reset
Console	1 console port(also can be used as M2M port)
Power	
Power supply	DC 12V/1A typical
Input voltage range	DC 9~15V
Power consumption	Idle: 260mA@12VDC
	Max: 500mA@12VDC
	Average:320mA@12VDC
System Inquiry	
User interface	WEB interface (Internet Explorer v6 or Later; Mozilla Firefox v1.5 or Later, or other Java-enabled Browsers)
	SYSLOG
Minimum System Requirements	Mobile Internet Access Subscription and Internet PC Adapter
	Computer with:
	Windows Vista , Windows XP SP2, Windows 2000 SP4, or Mac OS® X (v10.4/v10.3), Linux
	Internet Explorer 6 or Mozilla Firefox
Physical	
Operating Temperature	Storage: (-30°C to 70°C)
	Working: (-20°C to 65°C)
Humidity	95% Maximum (Non-condensing)
Dimensions	Item (L x B x H): 150mm x 98mm x 26mm (5.3" x 3.7" x 1.4")
	Packaging (L x B x H): 260mm x 190mm x 65mm (10.3" x 7.5" x 2.6")
Weight	Item: 800g (1.8lbs)
	Packaging: 2.0 lbs
Others	
Warranty	1 Year
Package Contents	R8 router,RJ-45 cable,Power adapter,Antenna,CD-ROM

PRODUCTS MODELS

R89 HSUPA Router	1 WAN, 4LAN, WIFI 802.11 b/g/n
R88 TDSCDMA Router	1 WAN, 4LAN, WIFI 802.11 b/g/n
R87 HSDPA Router	1 WAN, 4LAN, WIFI 802.11 b/g/n
R86 EVDO revA Router	1 WAN, 4LAN, WIFI 802.11 b/g/n
R861Y232 EVDO revA Router	1 WAN, 4LAN, WIFI 802.11 b/g/n , EVDO revA band A ,450M