

PRODUCT INTRODUCTION

R4 3G router is a high-performance, mobile, rugged, upgradeable, commercial-grade 3G cellular router that allows PC's, laptops, web-cams, PLCs, POS terminals, ATMs and other Ethernet-based devices to simultaneously utilize a single cellular data account for primary or backup connectivity.



Building on the success of the mobile technology, R4 series support the latest 3G high-speed wireless cellular technologies and dramatically expanded routing, security and management features.

The R4 3G router is the most advanced, secure and flexible cellular router available. The R4 protects your LAN equipment from Internet threats and gives you control over your cellular data connection in ways no other modem or wireless router can.

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

Industrial

The R4 3G router is ideal for remote telemetry, SCADA, device monitoring, machine-to-machine communication (M2M) and data collection. The R4 3G router can be configured to be “always connected” to a Cellular Data Network so you can access devices attached to the R4 3G router from anywhere. The R4 3G router can easily be powered by solar cells for truly remote applications.

Financial & Retail

With support for IPSec tunnels, the R4 3G router's integrated VPN client enables secure, independent communication with your headquarters and financial institution from any remote location. State-of-the-art DES / 3DES / AES encryption protects POS transactions such as cash register & credit card processing, lottery ticket sales, ATM machines and information kiosks.

Security

The R4 3G router's built-in VPN client and encryption technology allows you to design and deploy secure data access applications over the public Internet and CDMA or GSM cellular networks. The R4 3G router is ideal for security applications such as alarm monitoring and surveillance cameras. It is also commonly used to monitor traffic cameras and other highway sensors.

Emergency Management

When land-lines go down, cellular data may be the only option. The R4 3G router provides a complete LAN, Cellular Internet Access solution for dataintensive vehicles such as emergency response vans, mobile communications command posts, and public safety equipment. Proxicast's R4 3G router has been the choice of many first responders, support organizations, and commercial firms that need to be online anywhere and anytime.

Commercial

IT departments can provide their mobile workgroups (e.g. construction trailers, temporary locations, client sites, etc.) with a secure extension of the corporate network. The R4 3G router's integrated VPN client provides secure access to corporate systems without special software or configuration on each remote LAN computer. The R4 3G router can provide backup WAN connections when primary Internet service fails. It is also great for mobile Internet hotspots such in taxis, limos, buses and shuttles.

BENEFITS AND FEATURES

- Supports EV-DO RevA/Rev0, 1xRTT, HSPA, HSDPA, UMTS, EDGE & GPRS network
- 1 port 10/100 Ethernet LAN switch with LAN / DMZ configurable zones
- 3G module Built-in
- Support WiFi 802.11b/g/n
- Support GPS, According to the NMEA-0183 protocol, send the information such as location and speed to PC, PDA and other devices via serial port.
- RS-232 port offer a transparent channel for M2M application
- IPSec-based VPN client w/DES, 3DES, AES
- Stateful Packet Inspection Firewall
- Supports dynamic or static IP addresses assigned by cellular carriers
- Support APN/VPDN network



SPECIFICATION

3G		
Compatible Mobile Networks	R46	IS-95A/B IS-2000 Release 0 CDMA 2000 1x EV-DO Rev.A
	R47	HSDPA/UMTS/EDGE/GPRS/GSM
	R48	GSM/GPRS/EDGE/TD-SCDMA/TD-HSDPA
	R49	HSUPA/HSDPA/UMTS/EDGE/GPRS/GSM
Cellular Frequency band	R46	800Mhz or 800/1900Mhz or 450Mhz band A(optional)
	R47	Triple-band HSPA/UMTS 850/1900/2100 MHz Quad-band EDGE/GPRS/GSM 850/900/1800/1900 MHz
	R48	TD-HSDPA/TD-SCDMA 2010 - 2025 MHz TD-HSDPA/TD-SCDMA 1880 - 1920 MHz GSM/GPRS/EDGE 900/1800 MHz
	R49	Triple-band HSPA/UMTS 850/1900/2100 MHz Quad-band EDGE/GPRS/GSM 850/900/1800/1900 MHz
Bandwidth	R46	UL/DL: 1.8Mbps/3.1Mbps
	R47	UL/DL: 384kbps/7.2Mbps
	R48	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
	R49	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 (OPTIONAL)		
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)	

Route Features	
Advanced Firewall	Network Address Translation (NAT)
Features	Stateful Packet Inspection (SPI)
Media Access Control	CSMA/CA with ACK
VPN	IPSec
	PPTP
	L2TP
	VPN Pass-through
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
ICMP	supported
VRRP	supported
GPS(OPTIONAL)	supported
Hardware	
CPU platform	MIPS
Flash/RAM	8M/32M
Interface	
LAN	1X10/100M (RJ45 interface)
Antenna	1X antenna for 3G (50Ω SMA female interface)
	1X antenna for WiFi or GPS (SMA interface)(optional)
Antenna gain	3db
Led	§ ONLINE
	§ RUN
	§ LAN
	§ VPN
	§ WIFI

UIM/SIM	1.8V/3V
Terminals	10 holes Terminals
Power	
Power supply	DC 12V/1A
Inputvoltage	7~25V
Power consumption	Idle: 260mA@12VDC
	Max: 500mA@12VDC
	Average:320mA@12VDC
System Inquiry	
Browse	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): 115mm x 80mm x 26mm
	Packaging (L x B x H): 260mm x 190mm x 65mm
Weight	Item: 240g (1.8lbs)
	Packaging: 2.0 lbs
Others	
Warranty	1 Year
Package Contents	R4 router,RJ-45 cable,Power adapter,Antennas,CD-ROM

PRODUCTS MODELS

R49 HSUPA Router	1 serial port, 1LAN,WIFI/GPS(OPTIONAL)
R48 TDSCDMA Router	1 serial port, 1LAN,WIFI/GPS(OPTIONAL)
R47 HSDPA Router	1 serial port, 1LAN,WIFI/GPS(OPTIONAL)
R46 EVDO revA Router	1 serial port, 1LAN,WIFI/GPS(OPTIONAL)
R46Y232 EVDO revA Router	1 serial port, 1LAN, EVDO revA,450M,WIFI/GPS(OPTIONAL)