

ESR6670

3G Mobile Wireless-N Router

2.4GHz 19,000 sessions 2.5G / 3G / 3.5G 300Mbps



ESR6670 is a 3G-enabled 2T2R Wireless-N Router that delivers up to 6x faster speed (300Mbps) and 6X extended coverage than 802.11g devices. With Extreme Session Support (19000 Sessions) users are able to experience the unprecedented performance and smooth network services.

This product supports 3G data cards from HuaWei, OPTION, Sierra, BandLuxe and SIMCOM with standards covering WCDMA (HSDPA), CDMA2000 & TD-SCDMA. It is built-in with USB for easy and flexible plug-and-play interface for 3G cards.

Package Contents

- 1* 3G Mobile Wireless-N Router (ESR6670)
- 1*12V / 1.25A Power Adapter
- 1*QIG
- 1*CD (User's Manual)
- 2*SMA Antenna

ESR6670 supports home network with superior throughput and performance and unparalleled wireless range. With easy to use on the WPS function, it helps users to connect to wireless device with just one push button.

There's also a built-in 2-port full-duplex 10/100 Fast Switch to connect your wired-Ethernet devices together. The Router function ties it all together and lets your whole network shares a high-speed cable or DSL Internet connection.

Software Features

Router And Gateway

Topology	Infrastructure
Operation Mode	AP / Router / WDS
LAN	<ul style="list-style-type: none">- DHCP Server- Static Routing Table
WAN	<ul style="list-style-type: none">- PPTP- PPPoE- Static IP- DHCP Client

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	<ul style="list-style-type: none">- Clone MAC
Router	<ul style="list-style-type: none">- NAT/ NAPT- Static Routing- Dynamic Route- Virtual server mapping- IP address mapping- Port Forwarding- Port Triggering- Special application- ALG(Application Layer Gateway) support (RTP/RTSP, AOL, FTP, ICMP, WMP/MMS, NetMeeting, SIP)- DNS Relay- DDNS- Time Zone(NTP client)
Firewall	<ul style="list-style-type: none">- Blocking Ping- DoS(Blocking Ping, Port scan, Sync Flood)- MAC / IP Filtering- ICMP Blocking- SPI (Stateful Packet Inspection)- DMZ (Demilitarized Zone) Host- Policy Based Parental Controls<ul style="list-style-type: none">- Port Range / Service Filtering- Internet Domain Restriction- URL Filtering
VPN	VPN pass-through (PPTP, L2TP, IPSEC)
Wireless	<ul style="list-style-type: none">- Power saving(Green technology)- Multiple SSID- 64/128 bit WEP Encryption- WPA Personal (WPA-PSK using TKIP or AES)- WPA Enterprise (WPA-EAP using TKIP)- 802.1x Authenticator- Hide SSID in beacons- Wi-Fi Protection Setup (WPS)- WDS

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	<ul style="list-style-type: none">- ACL control- Best channel selection- Speed/Bandwidth monitor
QoS	<ul style="list-style-type: none">- WMM- Application base- Priority Queue- Bandwidth Allocation

Management	
Configuration	Web-based configuration (HTTP)
Firmware Upgrade	<ul style="list-style-type: none">- Via webpage upgrade- Auto recovery once firmware upgrade fail
Administrator Setting	Administrator password change
Reset Setting	<ul style="list-style-type: none">- Reboot- Reset to Factory Default
System monitoring	Speed and Bandwidth monitoring
Scheduling	<ul style="list-style-type: none">- Enable Firewall- Enable power saving
Easy access	User can type model name and access the main page.
Install wizard	Guide user to set-up Router smoothly

Technical Specifications	
Hardware Specifications	
MCU	RT3052, 384MHz embedded RF/MAC/BBP
Memory	32MB SDRAM
Flash	4MB
PCB dimension	100mm * 90mm
Physical Interface	<ul style="list-style-type: none">WAN: 1 * 10/100 Fast Ethernet RJ-45LAN: 2 * 10/100 Fast Ethernet RJ-45Reset buttonPower JackWPS (WiFi Protected Setup)

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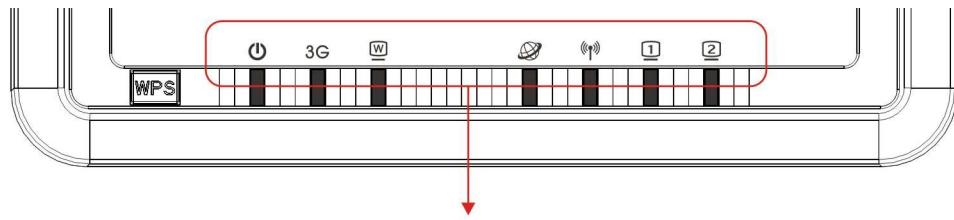
	USB (for 3G data card)
LEDs Status	Power Status
	WAN (Internet connection)
	10/100Mbps LAN1 & LAN2
	WLAN(Wireless connection)
	3G networks
Power Requirements	Power Supply:
	200 to 240 VDC ± 10% (ETSI)
	100 to 120 VDC ± 10% (FCC)
	Device: 12V/1.25A

Note:

1. WAN can either be USB port or WAN port. USB is the default WAN.
2. RAM and Flash design should be flexible to cover SOHO and ISP purpose.

Top Panel (LED status)

Power	1 (On-> orange Test/reset default->blink)
3G	1 (Link-> blue on)
WAN	1 (Link-> blue on, traffic->blink)
Internet	1 (Link-> blue on)
WLAN	1 (Link-> blue on, traffic->blink)
LAN1	1 (Link-> blue on, traffic->blink)
LAN2	1 (Link-> blue on, traffic->blink)



WPS	Power	3G	WAN	Internet	WLAN	LAN1	LAN1
	■ orange	■ blue	■ blue	■ blue	■ blue	■ blue	■ blue
	■ black		■ black			■ black	■ black

Legend:

- link/on
- reset default
- traffic

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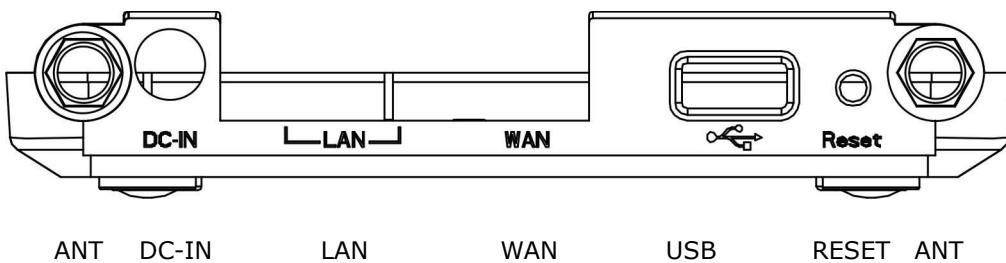
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Rear Panel (Interface)

Antenna

Detachable SMA



RF SPECIFICATION

Frequency Band	2.400~2.484 GHz																																																											
Modulation Technology	OFDM: BPSK, QPSK, 16-QAM, 64-QAM DBPSK, DQPSK, CCK 3G / 3.5G: WCDMA (HSDPA), CDMA2000 & TD-SCDMA																																																											
Operating Channels	11 for North America, 14 for Japan, 13 for Europe																																																											
Wireless Setting	Wireless Mode – 11b/ 11g /11n Channel Selection (Setting varies by Country) Channel Bandwidth (Auto, 20Mhz, 40Mhz) Transmission Rate 11g: Best. 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps																																																											
<table border="1"> <thead> <tr> <th rowspan="2">MCS index</th> <th colspan="2">Guard Interval 800ns</th> <th colspan="2">Guard Interval 400ns</th> </tr> <tr> <th>20MHz(Mbps)</th> <th>40MHz(Mbps)</th> <th>20MHz(Mbps)</th> <th>40MHz(Mbps)</th> </tr> </thead> <tbody> <tr><td>0</td><td>6.5</td><td>13.5</td><td>0</td><td>6.5</td></tr> <tr><td>1</td><td>13</td><td>27</td><td>1</td><td>13</td></tr> <tr><td>2</td><td>19.5</td><td>40.5</td><td>2</td><td>19.5</td></tr> <tr><td>3</td><td>26</td><td>54</td><td>3</td><td>26</td></tr> <tr><td>4</td><td>39</td><td>81</td><td>4</td><td>39</td></tr> <tr><td>5</td><td>52</td><td>108</td><td>5</td><td>52</td></tr> <tr><td>6</td><td>58.5</td><td>121.5</td><td>6</td><td>58.5</td></tr> <tr><td>7</td><td>65</td><td>135</td><td>7</td><td>65</td></tr> <tr><td>8</td><td>13</td><td>27</td><td>8</td><td>13</td></tr> <tr><td>9</td><td>26</td><td>54</td><td>9</td><td>26</td></tr> </tbody> </table>		MCS index	Guard Interval 800ns		Guard Interval 400ns		20MHz(Mbps)	40MHz(Mbps)	20MHz(Mbps)	40MHz(Mbps)	0	6.5	13.5	0	6.5	1	13	27	1	13	2	19.5	40.5	2	19.5	3	26	54	3	26	4	39	81	4	39	5	52	108	5	52	6	58.5	121.5	6	58.5	7	65	135	7	65	8	13	27	8	13	9	26	54	9	26
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10	39	81	10	39
11	52	108	11	52
12	78	162	12	78
13	104	216	13	104
14	117	243	14	117
15	130	270	15	130
Receive Sensitivity (Typical)	IEEE802.11n MCS0/8 @ -91dBm MCS7/15@ -74dBm	IEEE802.11g 6Mbps@ -86dBm 54Mbps@ -65dBm	IEEE802.11b 1Mbps@ -90dBm 11Mbps@ -86dBm	
Available transmit power	IEEE802.11n MCS 0~3@ \geq 15dBm MCS 4~5@ \geq 13dBm MCS 6~7@ \geq 12dBm	IEEE802.11g 6~18 Mbps@ \geq 15 dBm 24~36 Mbps@ \geq 13 dBm 48~54 Mbps@ \geq 12 dBm	IEEE802.11b 1, 11Mbps@ \geq 15 dBm	
Antenna *2	Peak Gain = 2 dBi with SMA connector			

Environment & Physical

Temperature Range	0 to 45° C - Operating, -10 to 70 ° C - Storage
Humidity (non-condensing)	15%~95% typical
Dimensions	125mm (L) x 98mm (W) x 25mm (H)