

ESR6670

3G Mobile Wireless-N Router

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



PRODUCT DESCRIPTION

ESR6670 is a 3G-enabled 2T2R Wireless-N Router that delivers up to 6x faster speed (300Mbps) and 3x 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.

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.

PACKAGE CONTENT

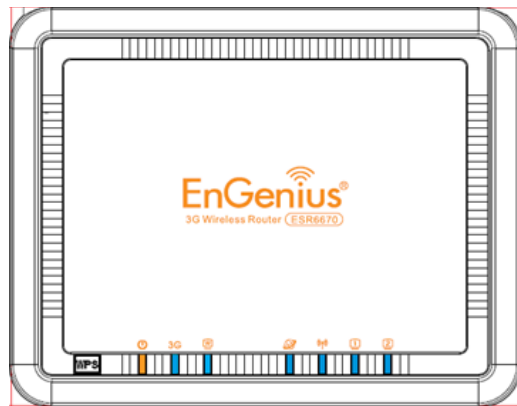
- 1* 3G Mobile Wireless-N Router (ESR6670)
- 1*12V / 1.25A Power Adapter
- 1*QIG
- 1*CD (User's Manual)
- 2*SMA Antenna

TECHNICAL SPECIFICATION

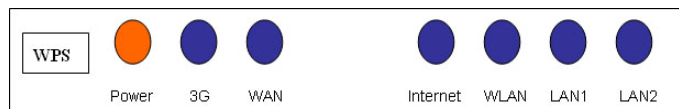
> Hardware Specification

| | |
|--------------------|---|
| MCU | RT3052, 384MHz embedded RF/MAC/BBP |
| Memory | 32MB SDRAM |
| Flash | 4MB |
| PCB dimension | 100mm * 90mm |
| Physical Interface | WAN: 1 * 10/100 Fast Ethernet RJ-45 LAN: 2 * 10/100 Fast Ethernet RJ-45 Rest button Power Jack WPS (WiFi Protected Setup) 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 |

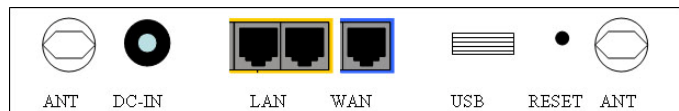
Panel



Top panel



Rear panel (Antenna: Detachable Antenna)



> 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) |

| > RF Specification | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------------------|--|-------------|----------------------|-------------|----------------------|--|-------------|-------------|-------------|-------------|---|-----|------|-----|----|---|----|----|------|----|---|------|------|------|----|---|----|----|------|----|---|----|----|------|----|---|----|-----|------|-----|---|------|-------|----|-----|---|----|-----|------|-------|---|----|----|------|----|---|----|----|------|----|----|----|----|------|----|----|----|-----|------|-----|----|----|-----|------|-----|----|-----|-----|-------|-----|----|-----|-----|-----|-----|----|-----|-----|-------|-----|
| Frequency Band | 2.400 ~ 2.484 GHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Modulation Technology | <ul style="list-style-type: none"> ● 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 | <ul style="list-style-type: none"> ● 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" style="width: 100%; border-collapse: collapse; text-align: center;"> <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>7.2</td><td>15</td></tr> <tr><td>1</td><td>13</td><td>27</td><td>14.4</td><td>30</td></tr> <tr><td>2</td><td>19.5</td><td>40.5</td><td>21.7</td><td>45</td></tr> <tr><td>3</td><td>26</td><td>54</td><td>28.9</td><td>60</td></tr> <tr><td>4</td><td>39</td><td>81</td><td>43.3</td><td>90</td></tr> <tr><td>5</td><td>52</td><td>108</td><td>57.8</td><td>120</td></tr> <tr><td>6</td><td>58.5</td><td>121.5</td><td>65</td><td>135</td></tr> <tr><td>7</td><td>65</td><td>135</td><td>72.2</td><td>157.5</td></tr> <tr><td>8</td><td>13</td><td>27</td><td>14.4</td><td>30</td></tr> <tr><td>9</td><td>26</td><td>54</td><td>28.9</td><td>60</td></tr> <tr><td>10</td><td>39</td><td>81</td><td>43.3</td><td>90</td></tr> <tr><td>11</td><td>52</td><td>108</td><td>57.8</td><td>120</td></tr> <tr><td>12</td><td>78</td><td>162</td><td>86.7</td><td>180</td></tr> <tr><td>13</td><td>104</td><td>216</td><td>115.6</td><td>240</td></tr> <tr><td>14</td><td>117</td><td>243</td><td>130</td><td>270</td></tr> <tr><td>15</td><td>130</td><td>270</td><td>144.4</td><td>300</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 | 7.2 | 15 | 1 | 13 | 27 | 14.4 | 30 | 2 | 19.5 | 40.5 | 21.7 | 45 | 3 | 26 | 54 | 28.9 | 60 | 4 | 39 | 81 | 43.3 | 90 | 5 | 52 | 108 | 57.8 | 120 | 6 | 58.5 | 121.5 | 65 | 135 | 7 | 65 | 135 | 72.2 | 157.5 | 8 | 13 | 27 | 14.4 | 30 | 9 | 26 | 54 | 28.9 | 60 | 10 | 39 | 81 | 43.3 | 90 | 11 | 52 | 108 | 57.8 | 120 | 12 | 78 | 162 | 86.7 | 180 | 13 | 104 | 216 | 115.6 | 240 | 14 | 117 | 243 | 130 | 270 | 15 | 130 | 270 | 144.4 | 300 |
| MCS index | Guard Interval 800ns | | Guard Interval 400ns | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 20MHz(Mbps) | 40MHz(Mbps) | 20MHz(Mbps) | 40MHz(Mbps) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 6.5 | 13.5 | 7.2 | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 13 | 27 | 14.4 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 19.5 | 40.5 | 21.7 | 45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 26 | 54 | 28.9 | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 39 | 81 | 43.3 | 90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 52 | 108 | 57.8 | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 58.5 | 121.5 | 65 | 135 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 65 | 135 | 72.2 | 157.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 13 | 27 | 14.4 | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 26 | 54 | 28.9 | 60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 39 | 81 | 43.3 | 90 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 52 | 108 | 57.8 | 120 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 78 | 162 | 86.7 | 180 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 104 | 216 | 115.6 | 240 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 117 | 243 | 130 | 270 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 15 | 130 | 270 | 144.4 | 300 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Receive Sensitivity (Typical) | <ul style="list-style-type: none"> ● IEEE802.11n MCS0/8 @ -91dBm MCS7/15@ -74dBm ● IEEE802.11g 6Mbps@ -86dBm 54Mbps@ -65dBm ● IEEE802.11b 1Mbps@ -90dBm 11Mbps@ -86dBm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| | |
|--------------------------|--|
| Available transmit power | <ul style="list-style-type: none"> ● IEEE802.11N MCS 0~3@ ≥ 15dBm MCS 4~5@ ≥ 13dBm MCS 6~7@ ≥ 12dBm ● IEEE802.11g 6~18 Mbps@ ≥ 15 dBm 24~36 Mbps@ ≥ 13 dBm 48~54 Mbps@ ≥ 12 dBm ● IEEE802.11b 1, 11Mbps@ ≥ 15 dBm |
| Antenna *1 | Peak Gain = 2 dBi with SMA connector |

| 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 ● Clone MAC |
| Router | <ul style="list-style-type: none"> ● NAT/ NATP ● 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 |

| | |
|-----|---|
| QoS | <ul style="list-style-type: none"> • WMM • Application base <ul style="list-style-type: none"> ➢ 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 | <ul style="list-style-type: none"> • Administrator password change |
| Reset Setting | <ul style="list-style-type: none"> • Reboot • Reset to Factory Default |
| System monitoring | <ul style="list-style-type: none"> • Speed and Bandwidth monitoring |
| Scheduling | <ul style="list-style-type: none"> • Enable Firewall • Enable power saving |
| Easy access | <ul style="list-style-type: none"> • User can type model name and access the main page. |
| Install wizard | <ul style="list-style-type: none"> • Guide user to set-up Router smoothly |

| > 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) |