



## ESR-9753

802.11b/g/n SOHO Router

2.4 GHz

11N AP/Router

150 Mbps

### PRODUCT DESCRIPTION



ESR-9753 is a 1T1R Wireless Single chip 11N Broadband Router that delivers up to 3x faster speeds than 802.11g devices. ESR-9753 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 4-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\*802.11n SOHO Router (ESR-9753)
- 1\*12V/1A Power Adapter
- 1\*QIG
- 1\*CD (User's Manual)
- 1\*SMA Antenna

\* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g, n chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

\*\* All specifications are subject to change without notice.

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February 17, 2009

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## Technical Specifications

### HARDWARE SPECIFICATIONS

PCB dimension	100mm * 90mm
Physical Interface	WAN: One 10/100 Fast Ethernet RJ-45 LAN: Four 10/100 Fast Ethernet RJ-45
LEDs Status	Rest button Power Jack WPS (WiFi Protected Setup) Power Status
Power Requirements	WAN (Internet connection) 10/100Mbps LAN1~LAN4 WLAN(Wireless connection) Power Supply: 200 to 240 VDC ± 10% (ETSI) 100 to 120 VDC ± 10% (FCC)
	Device: 12V/1A

#### ➤ Top Panel (LED status)

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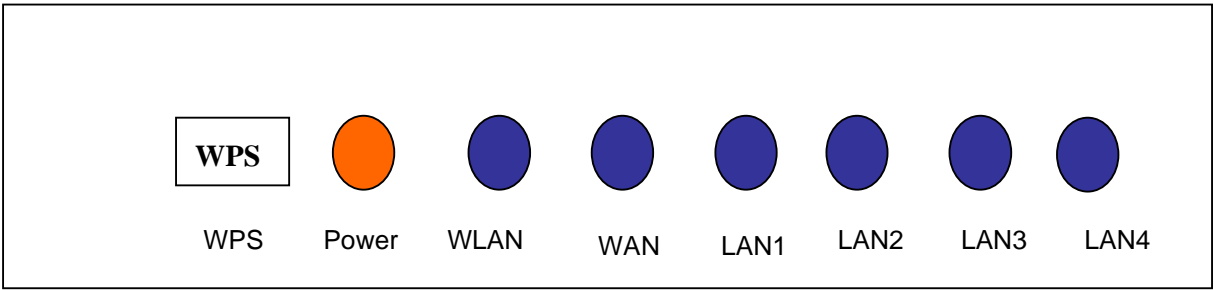
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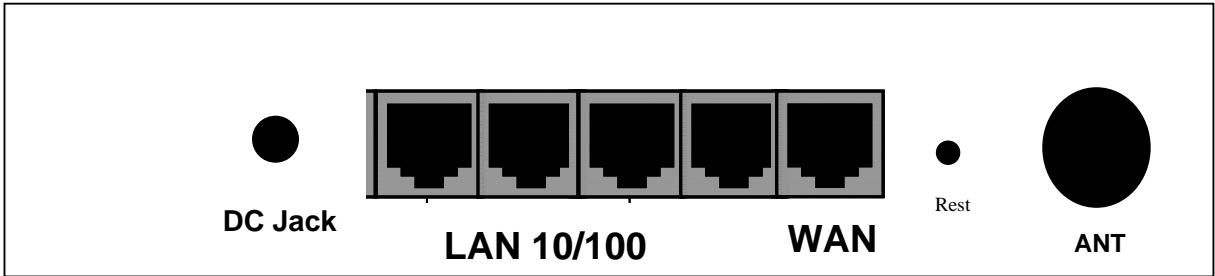


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WAN	1 ( Link-> blue on, traffic->blink)
LAN	4 ( Link-> blue on, traffic->blink)
WLAN	1 ( Link-> blue on, traffic->blink)
Power/Status	1 ( On-> red Test/reset default->blink)



➤ **Rear Panel (Interface)**



**RF SPECIFICATION**

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Frequency Band	2.400 ~ 2.484 GHz																																																				
Modulation Technology	<ul style="list-style-type: none"> <li>● OFDM: BPSK, QPSK, 16-QAM, 64-QAM</li> <li>● DBPSK, DQPSK, CCK</li> </ul>																																																				
Operating Channels	11 for North America, 14 for Japan, 13 for Europe																																																				
Wireless Setting	<ul style="list-style-type: none"> <li>● Wireless Mode – 11b/ 11g /11n</li> <li>● Channel Selection (Setting varies by Country)</li> <li>● Channel Bandwidth (Auto, 20Mhz, 40Mhz)</li> <li>● Transmission Rate -11g: Best. 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps</li> </ul> <table border="1" data-bbox="415 1050 1372 1514"> <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> </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
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Sensitivity (Typical)	<p>MCS0@ -91dBm</p> <p>MCS7@ -74dBm</p> <ul style="list-style-type: none"> <li>● IEEE802.11g</li> </ul> <p>6Mbps@ -90dBm</p> <p>54Mbps@ -70dBm</p> <ul style="list-style-type: none"> <li>● IEEE802.11b</li> </ul> <p>1Mbps@ -90dBm</p> <p>11Mbps@ -87dBm</p>
Available transmit power	<ul style="list-style-type: none"> <li>● IEEE802.11N</li> </ul> <p>MCS7@ 15dBm</p> <ul style="list-style-type: none"> <li>● IEEE802.11g</li> </ul> <p>6~54 Mbps@ 15dBm</p> <ul style="list-style-type: none"> <li>● IEEE802.11b</li> </ul> <p>1, 11Mbps@ 16dBm</p>
Antenna *1	Peak Gain = 2 dBi with SMA connector

## SOFTWARE FEATURES

### ➤ Router and Gateway

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

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	<ul style="list-style-type: none"> <li>•Static IP</li> <li>•DHCP Client</li> <li>•Clone MAC</li> </ul>
Router	<ul style="list-style-type: none"> <li>•NAT/ NATP</li> <li>•Static Routing</li> <li>•Dynamic Route</li> <li>•Virtual server mapping</li> <li>•IP address mapping</li> <li>•Port Forwarding</li> <li>•Port Triggering</li> <li>•Special application</li> <li>•ALG(Application Layer Gateway) support (RTP/RTSP, AOL, FTP, ICMP, WMP/MMS, NetMeeting, SIP)</li> <li>•DNS Relay</li> <li>•DDNS</li> <li>•Time Zone(NTP client)</li> </ul>
Firewall	<ul style="list-style-type: none"> <li>•Blocking Ping</li> <li>•DoS(Blocking Ping, Port scan, Sync Flood)</li> <li>•MAC / IP Filtering</li> <li>•ICMP Blocking</li> <li>•SPI (Stateful Packet Inspection)</li> <li>•DMZ (Demilitarized Zone) Host</li> <li>•Policy Based Parental Controls <ul style="list-style-type: none"> <li>➢ Port Range / Service Filtering</li> <li>➢ Internet Domain Restriction</li> <li>➢ Dynamic URL Filtering (OEM subscription service)</li> </ul> </li> </ul>
VPN	VPN pass-through (PPTP, L2TP, IPSEC)

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Wireless	<ul style="list-style-type: none"> <li>• <b>Power saving(Green technology)</b></li> <li>• 64/128 bit WEP Encryption</li> <li>• WPA Personal (WPA-PSK using TKIP or AES)</li> <li>• WPA Enterprise (WPA-EAP using TKIP)</li> <li>• 802.1x Authenticator</li> <li>• Hide SSID in beacons</li> <li>• Wi-Fi Protection Setup (WPS)</li> <li>• WDS</li> <li>• ACL control</li> <li>• Best channel selection</li> <li>• Speed/Bandwidth monitor</li> </ul>
QoS	<ul style="list-style-type: none"> <li>• WMM</li> <li>• Application base <ul style="list-style-type: none"> <li>➢ Priority Queue</li> <li>➢ Bandwidth Allocation</li> </ul> </li> </ul>

## ➤ Management

Configuration	Web-based configuration (HTTP)
Firmware Upgrade	<ul style="list-style-type: none"> <li>• Via webpage upgrade</li> <li>• Auto recovery once firmware upgrade fail</li> </ul>
Administrator Setting	<ul style="list-style-type: none"> <li>• Administrator password change</li> <li>• Idle time out</li> </ul>
Reset Setting	<ul style="list-style-type: none"> <li>• Reboot</li> <li>• Reset to Factory Default</li> </ul>
System	<ul style="list-style-type: none"> <li>• Speed and Bandwidth monitoring</li> </ul>

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monitoring	
Scheduling	<ul style="list-style-type: none"> <li>• Enable Firewall</li> <li>• Enable power saving</li> </ul>
Easy access	<ul style="list-style-type: none"> <li>• User can type model name and access the main page.</li> </ul>
Install wizard	<ul style="list-style-type: none"> <li>• Guide user to set-up Router smoothly</li> </ul>

**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)

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