

# ESR-9753CR

802.11b/g/n SOHO Router

- 2.4GHz
- 150Mbps
- 11N Router/Repeater /CB/CR



#### PRODUCT DESCRIPTION

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

ESR9753CR Datasheet Version 28082009

\*Theoretical wireless signal rate based on IEEE standard of 802.11 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

BUSINESS CLASS

## ESR-9753CR

**TECHNICAL SPECIFICATION**

**> HARDWARE SPECIFICATIONS**

|                    |  |
|--------------------|--|
| MCU                | RT3050, 320MHz embedded RF/MAC/BBP   |
| Memory             | 32MB SDRAM   |
| Flash              | 4MB  |
| PCB dimension      | 100mm * 90mm   |
| Physical Interface | WAN: One 10/100 Fast Ethernet RJ-45  |
|                    | LAN: Four 10/100 Fast Ethernet RJ-45                                       |
|                    | Rest button  |
|                    | Power Jack   |
| LEDs Status        | WPS (WiFi Protected Setup)   |
|                    | Power Status   |
|                    | WAN (Internet connection)  |
|                    | 10/100Mbps LAN1~LAN4   |
| Power Requirements | Power Supply:<br>200 to 240 VDC ± 10% (ETSI)<br>100 to 120 VDC ± 10% (FCC) |
|                    | Device: 12V/1A   |

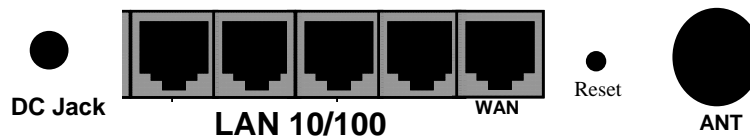
**> PANEL**

**TOP PANEL INTERFACE (LED STATUS)**



|              |   |
|--------------|---|
| 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            |   |                      |             |                      |             |
|-------------------------------|---|----------------------|-------------|----------------------|-------------|
| 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               <ul style="list-style-type: none"> <li>-11g: Best. 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps</li> <li>-11n:</li> </ul> </li> </ul> |                      |             |                      |             |
|                               | 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                |             |
| Receive Sensitivity (Typical) | <ul style="list-style-type: none"> <li>● IEEE802.11n<br/>MCS0@ -91dBm<br/>MCS7@ -74dBm</li> <li>● IEEE802.11g<br/>6Mbps@ -90dBm<br/>54Mbps@ -70dBm</li> <li>● IEEE802.11b<br/>1Mbps@ -90dBm<br/>11Mbps@ -87dBm</li> </ul>   |                      |             |                      |             |
| Available transmit power      | <ul style="list-style-type: none"> <li>● IEEE802.11N<br/>MCS7@ 15dBm</li> <li>● IEEE802.11g<br/>6~54 Mbps@ 15dBm</li> <li>● IEEE802.11b<br/>1, 11Mbps@ 16dBm</li> </ul>   |                      |             |                      |             |
| Antenna *1                    | Peak Gain = 2 dBi with SMA connector  |                      |             |                      |             |

| > SOFTWARE FEATURES: ROUTER AND GATEWAY |   |
|---|---|
| Topology                                | Infrastructure  |
| Operation Mode                          | AP Router / Repeater / Client Bridge / Client Router  |
| LAN                                     | <ul style="list-style-type: none"> <li>• DHCP Server</li> <li>• Static Routing Table</li> </ul>   |
| WAN                                     | <ul style="list-style-type: none"> <li>• PPTP</li> <li>• PPPoE</li> <li>• Static IP</li> <li>• DHCP Client</li> <li>• Clone MAC</li> </ul>  |
| Router                                  | <ul style="list-style-type: none"> <li>• NAT/ NAPT</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)  |
| Wireless                                | <ul style="list-style-type: none"> <li>• Power saving(Green technology)</li> <li>• Multiple SSID</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> |
| <b>&gt; MANAGEMENT</b>                 |   |
| 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> </ul>   |
| Reset Setting                          | <ul style="list-style-type: none"> <li>• Reboot</li> <li>• Reset to Factory Default</li> </ul>  |
| System monitoring                      | <ul style="list-style-type: none"> <li>• Speed and Bandwidth monitoring</li> </ul>  |
| 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>  |
| <b>&gt; ENVIRONMENT &amp; PHYSICAL</b> |   |
| 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)   |