

# ESR7550

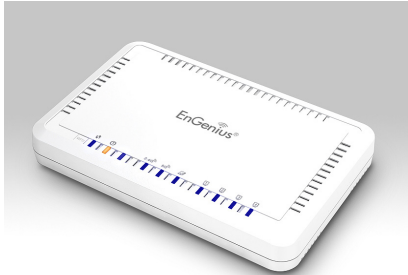
## Dual Band Concurrent Router

2.4GHz / 5GHz

Dual CPU 600Mbps

11N AP/Router

## PRODUCT DESCRIPTION



ESR7550 is a Dual Band Concurrent Wireless 11N Broadband Router with dual CPU that offers user unprecedented network performance. WMM support boosts streaming and multimedia intensive services. It supports 2.4Ghz band under 802.11 b/g/n mode while providing 5Ghz band to guarantee an interference-free network access.

Multiple SSID provides advance users to manage multiple users of various needs. TX power control enables flexible transmission tuning for different installation needs and prevents malicious eaves-dropping. Isolation, filter, firewall and full coverage of security standards promise a securer network environment.

Dual CPU operates work simultaneously therefore users can enjoy gaming, music or HD video on 5GHz band while web-surfing or emailing on 2.4Ghz. It also provides with built-in 4-port full-duplex 10/100 Fast Switch that allows wired ethernet for standard PC and other network devices. ESR7550 is definitely the optimal choice for both SOHO and small business entities.

## KEY FEATURES

- **2.4Ghz & 5Ghz Dual band concurrent**
- WPS button support
- WMM and QoS
- Multiple SSID
- WDS
- Scheduling Power saving
- Speed and Bandwidth monitoring
- Firmware recovery
- Best channel selection

\* 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.

5/15/2009

### EnGenius Networks Singapore Pte Ltd

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### PACKAGE CONTENT

- 1\* 802.11n Dual Band Concurrent Router (ESR7550)
- 1\* 12V/1.25 A Power Adapter
- 1\*QIG

## Technical Specifications

### HARDWARE SPECIFICATIONS

MCU	Ralink RT2880 266MHz (BB) +RT2850 (5G RF) Ralink RT3052 384MHz SoC (BB+RF)
Memory	32MB SDRAM
Flash	8MB+2MB
Expansion Slots	N/A
PCB dimension	150mm * 100mm
Physical Interface	<ul style="list-style-type: none"> <li>● WAN: 1 * 10/100 Fast Ethernet RJ-45</li> <li>● LAN: 4 * 10/100 Fast Ethernet RJ-45</li> <li>● Reset Button (5 second for reboot, 5~10 seconds for reset to factory default )</li> <li>● Power Jack</li> <li>● WPS push button (Wi-Fi Protected Setup)</li> </ul>
LEDs Status	<ul style="list-style-type: none"> <li>● Power/ Status</li> <li>● Internet (WAN)</li> </ul>

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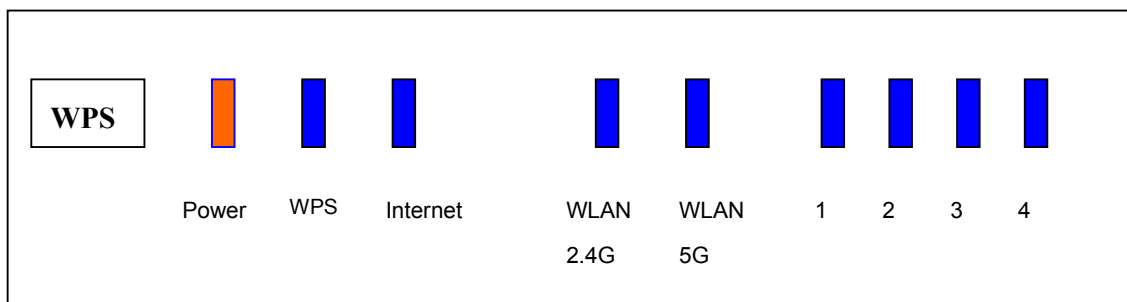
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	<ul style="list-style-type: none"> <li>● LAN1~LAN4 (10/100Mbps)</li> <li>● WLAN 2.4GHz</li> <li>● WLAN 5GHz</li> <li>● WPS</li> </ul>
Power Requirements	<ul style="list-style-type: none"> <li>● Power Supply: 200 to 240 VDC ± 10% (ETSI) 100 to 120 VDC ± 10% (FCC)</li> <li>● Device: 12V/1.25A</li> </ul>

### ➤ Front Panel (LED status)

WAN	1 ( Link-> blue on, traffic->blink)
LAN	4 ( Link-> blue on, traffic->blink)
WLAN	2 ( Link-> blue on, traffic->blink)
WPS	1 (Station associate-> blue blinking)
Power/Status	1 ( On-> orange Test/reset default->blink)



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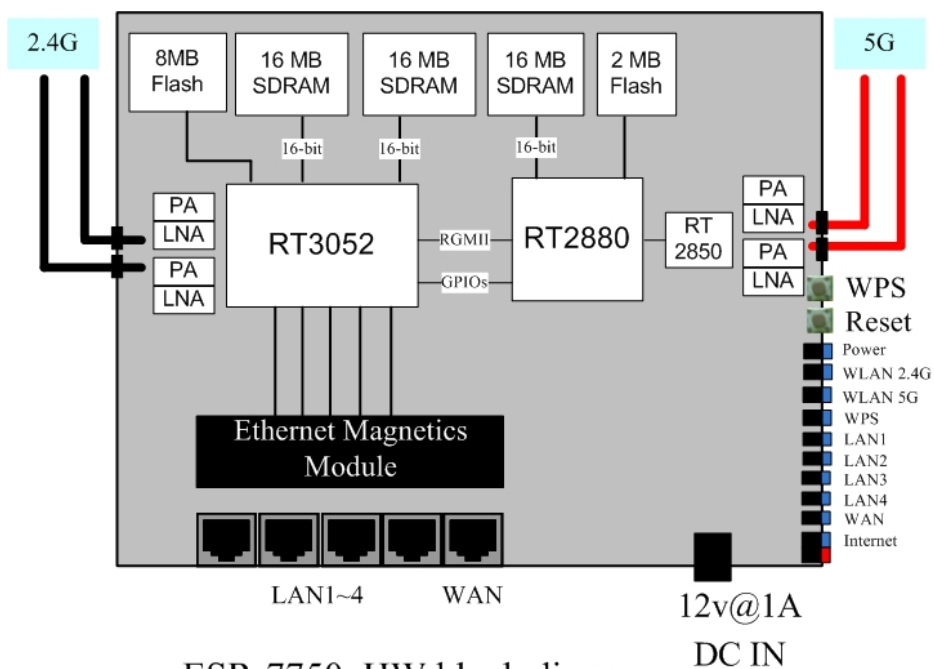
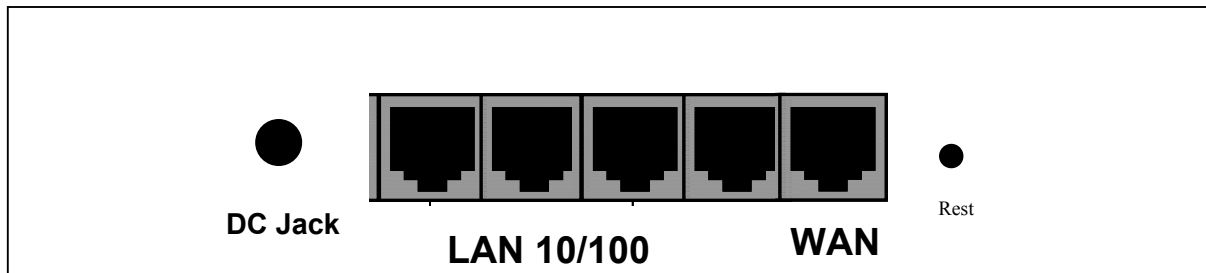
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➤ **Rear Panel (Interface)**



ESR-7750 HW block diagram

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### RF SPECIFICATION

Frequency Band	2.400 ~ 2.484 GHz(11b, 11g, 11n), 5G(11a)
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>● Operation Mode – AP / Router</li> <li>● Wireless Mode – 11a/11b/ 11g /11n</li> <li>● Channel Selection (Setting varies by Country)</li> <li>● Channel Bandwidth (Auto, 20Mhz, 40Mhz)</li> </ul> Transmission Rate - 11n only mode, 11b/g/n mix mode, 11b only mode, 11b/g mode, 11a mode, 11a/b/g/n mix mode
Receive Sensitivity (Typical)	11b: -91dBm 11g: -75dBm 11a: -75dBm 11n: -75dBm
Available transmit power	11b: 17dBm 11g: 14dBm 11a: 14dBm 11n: 15dBm
Antenna *4	Peak Gain = 4 dBi

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## SOFTWARE FEATURES

### ➤ Router and Gateway

Topology	Infrastructure
Operation Mode	AP/Router
LAN	<ul style="list-style-type: none"> <li>• Over 26% Power saving (Green technology)</li> <li>• DHCP Server</li> <li>• Static Routing Table</li> <li>• UPNP</li> <li>• Speed/Bandwidth monitor</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> </ul>

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	<ul style="list-style-type: none"> <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>•Isolation</li> <li>•Multiple SSID</li> <li>•Output Power Control</li> <li>•WDS</li> <li>•Power saving(Green technology)</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>•MAC filter</li> <li>•Best channel selection</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>

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### ➤ Management

Smart wizard	Insert Wizard CD and guide user to set up device smoothly
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 monitoring	Speed and Bandwidth 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>

## ENVIRONMENT & PHYSICAL

Temperature Range	0 to 45° C - Operating, -10 to 70 ° C - Storage
Humidity (non-condensing)	15% ~ 95% typical
Dimensions	170mm (L) x 111mm (W) x 26mm (H)
Weight	Around 320g

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