ESR1221N2

THE LEADER IN LONG RANGE WIRELESS HOME NETWORKING

300 Mbps Wireless N Router

Wirelessly share a broadband Internet connection

2.4GHz

b g n

Take advantage of the fastest wireless networking for your home or small home office. The ESR1221N2 300Mbps Wireless N Router was designed with range and speed in mind. With expanded bandwidth, multiple users can wirelessly go online, make large file transfers, print to networked printers, and stream multimedia - at the same time. For larger homes or offices, the ESR1221N2 Router is a perfect choice to connect everyone together and to the Internet.

Powerful Protection

Supports the latest industry standard wireless data encryption to protect your data and networking activity - all with a push of a button.

Easy to use and setup

With the included Installation Wizard and advanced push-button setup, you will be up and running and on the Internet in minutes.

One Touch Setup

WDS

POWER SAVING

WEP WPA WPA2

HACKER SHIELD

Key Differentiators

WIRELESS 802.11N TECHNOLOGY

The most advanced wireless networking technology for the best range and speed

EASY SETUP

Smart Wizard CD with Step-by-Step screens to guide you through first-time setup

MULTIPLE SSIDS

Secure private local Internet while sharing wireless connection with others

QUALITY OF SERVICE (QoS)

Prioritize latency-sensitivity data to ensure mutlimedia playing without lags

SECURITY & MANAGEMENT

Secure Push-Button Setup
Auto Firmware Recovery
WEP/WPA/WPA2
Powerful SPI Firewall
Wireless MAC Address Filtering

EXTERNAL ANTENNA FOR GREATER COVERAGE

EnGenius Wireless N Multimedia Router
Cable Modem or ADSL
Internet Radio
iPad
Media Player
HDTV
Stereo
EnGenius Wireless N USB Adapter
Gaming Console

Maximum data rates are based on IEEE 802.11 standards. Actual throughput and range can vary depending on many factors including network conditions, environmental factors, distance between devices, radio interference in the operating environment, and mix of devices in the network

EnGenius®

www.engeniustech.com

Technical Specifications Specifications may change without notice.

HARDWARE SPECIFICATIONS

Memory	16MB SDRAM
Flash	2MB
Physical Interface	WAN: One 10/100 Fast Ethernet RJ-45 LAN: Four 10/100 Fast Ethernet RJ-45 Reset Button Power Jack WPS (Wi-Fi Protected Setup)
LED's Status	Power Status WAN (Internet connection) 10/100Mbps LAN1~ LAN4 WLAN (Wireless Connection)
Power Requirements	Power Supply: 200 to 240 VDC ± 10% (ETSI) 100 to 120 VDC ± 10% (FCC) Device: 5A/1A
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)

RF SPECIFICATIONS

Frequency Band	2.400 – 2.484 GHz
Modulation Technology	OFDM: BPSK, QPSK, 16-QAM, 64-QAM DBPSK, DQPSK, CCK
Operation Channels	11 for North America, 14 for Japan, 13 for Europe

Wireless Settings

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

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)	IEEE 802.11n (2RX)
	  ≤ - 82dBm
	IEEE 802.11g (2RX)
	  ≤ - 90dBm
	IEEE 802.11b (1RX)
	  ≤ - 90dBm

Available Transmit Power	IEEE 802.11n: MCS 0 –15@ >16dBm IEEE 802.11g: 6 – 54 Mbps@16dBm IEEE 802.11b: 1, 11Mbps@18dBm
Antenna *2	Peak Gain=2 dbi
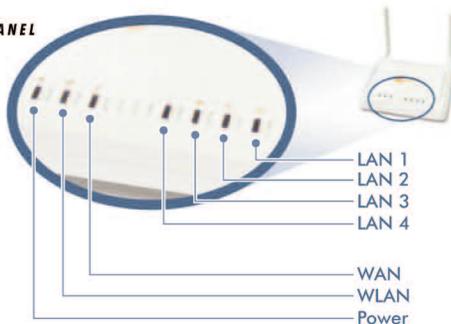
SOFTWARE FEATURES

Router and Gatway

Topology	Infrastructure
Operation Mode	AP/Router
LAN	DHCP Server Static Routing Table UPNP
WAN	PPTP • PPPoE • Static IP • DHCP Client • Clone MAC address
Router	NAT/ NAPT Static Routing Dynamic Route Virtual server mapping IP address mapping Port Forwarding Port Triggering Special application ALG(Application Layer Gateway) support DDNS Time Zone(NTP client)

Firewall	Block ICMP Ping
	DoS(Block ICMP Ping, Port scan, Sync Flood)
	MAC/IP Filtering
	ICMP Blocking
	SPI (Stateful Packet Inspection)
	DMZ (Demilitarized Zone) Host
	Policy Based Parental Controls
	    Port Range / Service Filtering
	    Internet Domain Restriction

VPN	VPN pass-through (PPTP, L2TP)
Wireless	64/128 bit WEP Encryption WPA-PSK using TKIP or AES WEP/WPA/WPA2 802.1x Authenticator Hide SSID in beacons Wi-Fi Protection Setup (WPS) WDS ACL control Best Channel selection Speed/Bandwidth monitor

QoS	WMM
	Application base
	    Priority Queue
	    Bandwidth Allocation

Management

Configuration	Web-based configuration (HTTP)
Firmware Upgrade	Via webpage upgrade Auto recovery if firmware upgrade fails
Administrator Setting	Administrator password change • Idle time out
Reset Setting	Reboot • Reset to Factory Default
System monitoring	Speed and bandwidth monitoring
Scheduling	Enable Firewall • Enable power saving
Easy Access	User can type model name and access the main page
Install wizard	Guides user to set-up router smoothly

ENVIRONMENT & PHYSICAL

Temperature Range	Operating: 0°C to 45°C (32°F to 113°F) Storage: -10°C to 70°C (14°F to 158°F)
Humidity (non-condensing)	15% – 95% typical
Dimensions	L: 4.92" (125mm) x W: 3.86" (98mm) x H: 0.98" (25mm)
Weight	0.61 lb. (275g)

FRONT PANEL

LAN 1
LAN 2
LAN 3
LAN 4
WAN
WLAN
Power

ANT   DC Jack   LAN 10/100   WAN   Reset   ANT
BACK PANEL
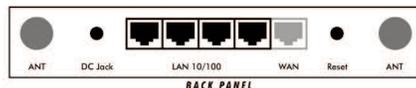
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