



ENHWI-N3

802.11n Wireless Router

Product Description

Encore's ENHWI-N3 802.11n Wireless Router's 1T1R Wireless single chip can deliver up to 3x faster speed than of 802.11g devices. ENHWI-N3 supports home or small office network with superior throughput and performance and unparalleled wireless range. With easy to use WPS™ function, it helps users securely connect to a wireless device with just one push of a button.

ENHWI-N3 is also equipped with a built-in 4-port full-duplex 10/100 Fast Ethernet Switch to connect to your wired-Ethernet computers and devices together to make a LAN. The Router function ties it all together and lets your whole network computers and laptops able to browse the internet and share the high-speed cable or DSL Internet connection using just one public IP address.

ENHWI-N3 Specification Sheet

16483 Old Valley Blvd. La Puente, CA 91744

Tel - (626) 336-4567 / Fax - (626) 336-2345

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Key Features

- Compatible with IEEE 802.11n Draft 2.0 Specifications, provides wireless speed up to 150 Mbps physical data rate
- Backward compatible with IEEE 802.11g high rate standard to provide wireless Ethernet speeds of 54 Mbps data rate
- 4 x 10/100 Mbps Fast Ethernet port for wired LAN with Auto MDI-X function
- 1 x 10/100Mbps WAN port for DSL or Cable Modem with Auto MDI-X function
- IEEE 802.11 b/g/n Infrastructure operating modes
- Allows auto fallback data rate for optimized reliability, throughput and transmission range
- Supports wireless data encryption with 64/128-bit WEP standard for security
- Supports enhance security for WPA-PSK, WPA2-PSK, WPA and WPA2
- Web-based configuration tools and management via WEB Browser
- Supports WPS™ (Wi-Fi Protected Setup Specification Windows)
- Supports PPPoE / PPTP / L2TP protocol for xDSL ISP connection
- Supports NAT feature to share one public IP address to all LAN user
- Supports DHCP Server / Client
- Supports Firewall protection, Virtual server mapping, Special application setting
- Supports UPnP
- Supports statistics information

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HARDWARE SPECIFICATION

MCU (Chipset)	Ralink RT3050, 320MHz embedded RF/MAC/BBP
Memory	16MB SDRAM
Flash	4MB
Interface Ports	<i>WAN:</i> One 10/100 Fast Ethernet RJ-45 <i>LAN:</i> Four 10/100 Fast Ethernet RJ-45 Reset Button Power Input Port Jack WPS™ (WiFi Protected Setup) Button
LED Status	Power Status WAN (Internet connection) 10/100Mbps LAN1 to LAN4 WLAN (Wireless Connection)
Power Requirements	Power Supply: (Full Range) 200 to 240 VAC ± 10% (ETSI) Europe 100 to 120 VAC ± 10% (FCC) US Device Input Power: 12 VDC / 1A

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
Operating Channels	11 for North America, 13 for Europe

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Wireless Settings	<ul style="list-style-type: none"> ● Wireless Mode – 802.11b / 802.11g /802.11n Draft 2.0 ● Channel Selection (Varies by Country or Region) ● Channel Bandwidth (Auto 20/40 MHz, 20MHz, 40MHz) ● Transmission Rate <ul style="list-style-type: none"> - 11g: Best=54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps <table border="1" data-bbox="536 394 1358 931" style="margin-left: 40px;"> <thead> <tr> <th rowspan="2">MCS Index</th> <th colspan="2">Guard Interval 800 ns</th> <th colspan="2">Guard Interval 400 ns</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 800 ns		Guard Interval 400 ns		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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Receive Sensitivity (Typical)	<ul style="list-style-type: none"> ● IEEE802.11n - MCS0@ -91dBm, MCS7@ -74dBm ● IEEE802.11g - 6Mbps@ -90dBm, 54Mbps@ -70dBm ● IEEE802.11b - 1Mbps@ -90dBm, 11Mbps@ -87dBm 																																																	
Available Transmit Power	<ul style="list-style-type: none"> ● IEEE802.11n - MCS7@ 15dBm ● IEEE802.11g - 6~54 Mbps@ 15dBm ● IEEE802.11b - 1, 11Mbps@ 16dBm 																																																	
Antenna X1	Peak Gain = 2 dBi with SMA connector																																																	

Environmental and Physical

Temperature Range	0 to 45° C - Operating, -10 to 70 ° C - Storage
Humidity (non-condensing)	15%~95% typical
Dimensions	138mm (L) x 97mm (W) x 25mm (H)

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SOFTWARE FEATURES

Router and Gateway

Topology	Infrastructure
Operation Modes	AP / Router
LAN	<ul style="list-style-type: none">• DHCP Server• Static Routing Table• UPnP
WAN	<ul style="list-style-type: none">• PPTP• PPPoE• L2TP• Static IP• DHCP Client• Clone MAC
Router	<ul style="list-style-type: none">• NAT/ NAPT• Static Routing• Dynamic Route• Virtual Server Mapping• IP Address Mapping• Port Forwarding• Port Triggering• Special Application• ALG (Application Layer Gateway), supports (RTP/RTSP, AOL, FTP, CMP, WMP/MMS, NetMeeting, SIP)• DNS Relay• DDNSTime Zone (NTP client)

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Firewall	<ul style="list-style-type: none"> • Ping blocking • 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 • Dynamic URL Filtering / Keyword Filtering
VPN	VPN pass-through (PPTP, L2TP, IPSEC)
Wireless	<ul style="list-style-type: none"> • Power Saving (Green Technology) • 64/128 bit WEP Encryption • WPA Personal (WPA-PSK using TKIP or AES) • WPA Enterprise (WPA-EAP using TKIP) • 802.1x Authenticator • Hide SSID in beacons • Wi-Fi Protected Setup™ (WPS™) • WDS • ACL control • Best channel selection • Speed / Bandwidth monitor
QoS	<ul style="list-style-type: none"> • WMM (Wi-Fi Multimedia) • Application base <ul style="list-style-type: none"> ○ Priority Queue ○ Bandwidth Allocation

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ENHWI-N3 Management

Configuration	Web-based configuration (HTTP) using popular web browsers
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• Idle time out
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 smart wizard	<ul style="list-style-type: none">• Guide the users for a user friendly initial router setup

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