



Model: RNRR-81



RNRR-81 is a high-speed 802.11n b/g wireless Access Point and a DSL/Cable broadband Router which offers shared Internet access via DSL/Cable modem for all the connected LAN/WLAN users. Equipped with latest Draft 802.11n technology, RNRR-81 is designed specifically for small business and home users looking to deploy multi-functional Access Point and Router which delivers up to 300Mbps wireless link data rate and very effectively sustains the 802.11n radio signal to optimizes for higher throughputs over range. Setting new standards in throughput, range, reliability, and security, RNRR-81 delivers the ultimate wireless triple play experience of video, voice, and data transmission for the small business and home users.

In addition to standard AP and Router features, RNRR-81 can support Router with WDS, AP client mode, WMM, and WPS by project request. Integrating the superior experiences of WLAN/embedded antenna/mechanical design service and WiFi Chipset Partner enable customers to quickly and easily bring competitive price/performance WLAN products to market.

Key Features:

- 802.11n draft 2.0 compliance effectively interoperates with other chipsets.
- Enables bandwidth of up to 300Mbps link rate, six times the throughput of 802.11g.
- Supports IEEE 802.11b/802.11g backward compatibility allowing inter-operability among multiple wifi networks.
- Supports multiple operation modes of Access Point and Router.
- Supports Static IP and DHCP client address assignment.
- Supports advanced security of WEP 64/128/152 encryption, 802.1x authentication, WPA/WPA2 pre-shared key/TKIP/AES, MAC based Access Control List for wireless interface, primary and secondary RADIUS server support.
- Supports PPTP pass through, L2TP pass through, software DMZ, IPSec pass through, and AOEII/WarCraft3 applications.
- Supports built-in DHCP server, static DHCP assignment, and Class A,B,C private IP address and subnet.
- Supports web-based management tool, UPnP, upload and download test-based configuration file via HTTP browser, firmware upgrade via HTTP browser, and remote management control.
- Supports settable transmit power levels to adjust coverage cell size
- RoHS 2002/95/EC compliance meets environment-friendly requirement.

Hardware Specifications:


Main Chipset	CPU: 5VT1310, MAC/BB: Ralink RT2860, RF: Ralink RT2820, Ethernet Switch Controller: ADM6996FC
Standard Conformance	802.11n, 802.11b/g, 802.3 10Base-T, 802.3u 100Base-TX, 802.3x Flow Control, Auto MDI/MDI-X.
Frequency Range	<ul style="list-style-type: none"> ▪ USA: 2.400 ~ 2.483GHz ▪ Europe: 2.400 ~ 2.483GHz ▪ Japan: 2.400 ~ 2.497GHz ▪ China: 2.400 ~ 2.483GHz
Interface	<ul style="list-style-type: none"> ▪ WiFi: 802.11n, 802.11b/g ▪ WAN: 1x RJ-45 10/100Mbps port ▪ LAN: 4 x RJ-45 10/100Mbps port
Modulation Technique	<ul style="list-style-type: none"> ▪ DSSS with CCK, DQPSK, DBPSK ▪ OFDM with BPSK, QPSK, 16QAM, 64QAM

Hardware Specifications:	
Data Rate	<ul style="list-style-type: none"> ▪ 802.11b: <ul style="list-style-type: none"> ◦ 1, 2, 5.5 and 11Mbps ▪ 802.11g: <ul style="list-style-type: none"> ◦ 6, 9, 12, 18, 24, 36, 48, 54Mbps ▪ 802.11n: <ul style="list-style-type: none"> ◦ 20MHz channel: <ul style="list-style-type: none"> ◦ 1Nss: 65Mbps @ 800GI, 72.2Mbps @ 400GI (Max.) ◦ 2Nss: 130Mbps @ 800GI, 144.4Mbps @ 400GI (Max.) ◦ 40MHz channel: <ul style="list-style-type: none"> ◦ 1Nss: 135Mbps @ 800GI, 150Mbps @ 400GI (Max.) ◦ 2Nss: 270Mbps @ 800GI, 300Mbps @ 400GI (Max.)
Operating Channels	<ul style="list-style-type: none"> ▪ USA/Canada: 11 (1~11) ▪ Major Europe Countries: 13 (1~13) ▪ France: 4 (10~13) ▪ Japan: 14 for 802.11b (1~13 or 14th), 13 for 802.11g (1~13) ▪ China: 13 (1~13)
Operation Distance	<ul style="list-style-type: none"> ▪ 802.11b <ul style="list-style-type: none"> ◦ outdoor: 150m @ 11Mbps, 300m @ 1Mbps ◦ indoor: 300m @ 1Mbps, 100m @ 1Mbps ▪ 802.11g <ul style="list-style-type: none"> ◦ outdoor: 50m @ 54Mbps, 300m @ 6Mbps ◦ indoor: 30m @ 54Mbps, 100m @ 6Mbps ▪ 802.11n <ul style="list-style-type: none"> ◦ outdoor: 30m @ 300Mbps, 250m @ 6.5Mbps ◦ indoor: 20m @ 300Mbps, 100m @ 6.5Mbps
MAC Protocol	CSMA/CA with ACK architecture 32-bit MAC
Operation Mode	Infrastructure and Ad-hoc mode
Wi-Fi Compliance	Wi-Fi 2.4GHz by request
Operation Temperature Range	0°C ~ +50°C
Storage Temperature Range	-10°C ~ +70°C
Operating Humidity	15% ~ 95%, non-condensing
Storage Humidity	max. 95%, non-condensing
EMC Certificate	FCC part 15C, IC RSS210, CE ETSI EN301893 EN60950, Telec, VCCI Class B
Environment-Friendly Compliance	RoHS
Antenna	three 2.4GHz dipole antenna
LED Signaling	five LED on board
WAN Port	one RJ-45 10/100Mbps
LAN Ports	four RJ-45 10/100Mbps
Reset Button	software and hardware restore to factory default
Power Supply	external power adapter with 5V/3A or 12V/1A input
Dimension	TBD
Weight	TBD
EMC Certificate	FCC part 15C, CE ETSI EN301893 EN60950
Environment-Friendly Compliance	RoHS

Software Specifications:	
RTOS	Linux 2.6 kernel
Security	<ul style="list-style-type: none"> ▪ WEP: 64/128/152 WEP encryption ▪ 802.1x authentication ▪ WPA/WPA2 pre-shared key, TKIP, AES ▪ MAC-based access control list for wireless interface ▪ Primary and secondary RADIUS server
DHCP Server	<ul style="list-style-type: none"> ▪ built-in DHCP server ▪ support static DHCP assignment ▪ support Class A, B, C private IP address and subnet

Software Specifications:	
Management	<ul style="list-style-type: none"> ▪ web-based management tool(web GUI) ▪ UPnP ▪ upload & download text-based configuration file via HTTP browser ▪ firmware upgrade via HTTP browser ▪ remote management control ▪ software & hardware restore to factory default ▪ watch dog timer to warm bootup system *
Log Support	<ul style="list-style-type: none"> ▪ system log ▪ security log * ▪ associated wireless client table *
SNMP/MIB	<ul style="list-style-type: none"> ▪ SNMP v1 & v2 ▪ Ether-like MIB (RFC-1643) ▪ MIB II (RFC-1213) * ▪ 802.11 MIB *
LAN IP Address Assignment	<ul style="list-style-type: none"> ▪ static IP address ▪ DHCP client
Network Protocol	TCP/IP support
NAT & Firewall	<ul style="list-style-type: none"> ▪ PPTP pass through ▪ L2TP pass through ▪ Default private receiver (software DMZ) ▪ IPsec pass through ▪ special applications support – AOEII and WarCraft3 * ▪ Virtual server * ▪ IP/URL/MAC packet, LAN packet filtering *
IP Routing	<ul style="list-style-type: none"> ▪ RIP v1 & v2 ▪ static and default route
DNS	<ul style="list-style-type: none"> ▪ DNS relay * ▪ dynamic DNS
WAN Encapsulation	<ul style="list-style-type: none"> ▪ static IP ▪ DHCP client ▪ multiple PPPoE client (up to 4 sessions) with Flets services * ▪ unnumbered IP support *
Basic Wireless	<ul style="list-style-type: none"> ▪ 802.11n b/g ▪ 802.1d spanning tree protocol (STP) * ▪ bridging between Ethernet and wireless LAN ▪ RTS/CTS control ▪ data rate control ▪ Tx preamble control ▪ fragmentation control ▪ slot time control
Advanced Wireless	<ul style="list-style-type: none"> ▪ router ▪ Access Point ▪ router with WDS support * ▪ AP client mode * ▪ WMM support * ▪ WPA support *
Remark	* : these features will be support by project base only.

Ordering Information:	
RNRR-81	802.11n b/g wireless router

	<h2>Unex Technology Corp.</h2> <p>- Durable Bridge to Wireless</p>	<p>Sales-a@unex.com.tw http://www.unex.com.tw</p>
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