

# PRODUCT DATASHEET

Wireless SOHO Router

NSR-1220

2.4 GHz

802.11 b/g

54 Mbps

NSR-1220 is a 2.4GHz 802.11b/g broadband Wi-Fi router. With leading edge SoC (System-on-Chip) technology, broadband subscribers will experience lightning speed Internet access, easy local connectivity, rich software application and secure network protection. Namely, it's most suited for SOHO users wishing to make best use of their broadband service.



Features	Benefits
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices with legacy protection
NAT Router	Multiple computer Internet Access, also act as natural firewall
WEP/WPA/WPA2/ IEEE 802.1x support	Securing network from malicious access
DHCP	Simplify network configuration and management
MAC address filtering	Ensures secure network connection
UPnP(Universal Plug and Play)	Friendly to special application e.g. instant messenger, VoIP
Port forwarding	Set up application server (FTP, Web, Email, ...) on LAN
Access control	WLAN-to-WAN access control (allow/disallow), prevent users from access unwanted content
Firewall	Prevent malicious access from Internet
DoS (Denial of Service) protection	Prevent from well-known DoS attack
Built-in 4-port Switch automatically detects cable type	Easy local connectivity
Web-based configuration	Simple and intuitive network management
Firmware change via the Web-based configuration screen	Allow easy upgrade/restore/dump system configuration via web interface
System log	Logging critical event according to network manager's criteria

\* Theoretical wireless signal rate based on IEEE standard of 802.11a, b, g chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.

\*\* All specifications are subject to change without notice.

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## Technical Specifications

### Standards

IEEE802.11b/g, IEEE802.1x,  
IEEE802.3, IEEE802.3u

### Wi-Fi data speed

IEEE 802.11b: 11/5.5/2/1Mbps  
IEEE 802.11g:  
54/48/36/24/18/12/9/6Mbps

### Compatibility

IEEE 802.11g/ IEEE 802.11b

### Power Requirements

Power Adapter:  
Input: 120VAC 60Hz 20 W  
Output: DC 12V / 1A

### Status LEDs

4\*LAN : Link/Activity  
WLAN : Link/Activity  
Power : On/Off  
Internet : On/Off/Activity

### Regulation Certifications

FCC Part 15/UL, ETSI  
300/328/CE

### RF Information

#### Frequency Band

2.400-2.497GHz (Japan Band)  
2.400-2.483GHz (North  
America, Europe Band)  
2.455-2.475GHz (Spand Band)  
2.446-2.483GHz (France Band)

### Media Access Protocol

Carrier Sense Multiple Access  
with Collision Avoidance  
(CSMA/CA)

### Modulation Technology

Orthogonal Frequency  
Division Multiplexing (OFDM)  
DBPSK @ 1Mbps  
DQPSK @2Mbps  
CCK @ 5.5 & 11Mbps  
BPSK @ 6 and 9 Mbps  
QPSK @ 12 and 18 Mbps  
16-QAM @ 24 and 36 Mbps  
64-QAM @ 48 and 54 Mbps

### Operating Channels

11 for North America, 14 for  
Japan, 13 for Europe,

### Receive Sensitivity (Typical)

-86dBm @ 1Mbps  
-68dBm @ 54Mbps

### Available transmit power

#### (Typical)

**2.412~2.472G(IEEE802.11g)**

16 dBm min. @6 ~ 54Mbps

**2.412~2.472G(IEEE802.11b)**

21 dBm. @1~11Mbps

### Antenna Connector

Dipole antenna with reverse SMA  
connector

### Networking

#### Operation Mode

AP/Router

#### Interface

LAN: Four 10/100Mbps Ethernet  
(RJ-45); WAN: One 10/100Mbps  
Ethernet (RJ-45); WLAN:  
802.11b/g air interface

### Security

- IEEE802.1x Authenticator  
/RADIUS Client  
(EAPMD5/TLS/TTLS) Support  
in AP Mode
- MAC address filtering

### Network Protocol

NAT/PAT  
Internet connection management:  
Fixed IP/DHCP/PPPoE/PPTP  
DHCP (server/client)  
HTTP  
UPnP  
DDNS (Dynamic DNS)  
PPTP/L2TP/IPsec (pass-thru)

### Management

Web-based configuration (HTTP)

### Firmware Upgrade

Upgrade firmware via web-  
browser

### Physical

#### Dimensions (HxWxD)

16.7x10.8x2.5cm

### Environmental

#### Temperature Range

Operating: 0°C to 50°C (14F  
to 122F)

Storage: -40°C to 70°C (-40F  
to 158F)

#### Humidity (non-condensing)

5%~95% Typical

### Package Contents

Device unit  
Power Adapter  
One CD-ROM with User Manual  
Dipole Antenna

### System requirement

WAN: Broadband (cable, DSL)  
Internet service and modem with  
Ethernet connection

LAN: 2.4 GHz 802.11 b/g  
wireless adapter. Alternatively, an  
Ethernet adapter and cable for  
each computer

### Related Product(s)

11a/b/g High-power Wireless  
USB Adapter

NUB-362/362 EXT (802.11b/g)

NUB-862 (802.11a/b/g)

NUB-8301 (802.11a/b/g)

11b High-power Client Bridge  
2611CB3+(Deluxe)

Indoor AP-Client

NCB-3220 (802.11b/g)

NCB-8610 (802.11a/b/g)

Outdoor AP-Client

NOC-3220 Series (802.11b/g)

NOC-8610 Series

(802.11a/b/g)

Web browser with Java installed  
(Internet Explorer5.5 or later,  
Netscape Navigator6.1 or above,  
Mozzila Firefox 1.5 and above)

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