

# PRODUCT DATASHEET

Wireless Multi-Client Bridge/AP/ WDS

NCB-8610

2.4&5GHz

802.11 a/b/g

54 Mbps

The Wireless High Power and High Gain Multi-Client Bridge/Access Point/ WDS (wireless distribution system) operates seamlessly in the dual band 2.4/5 GHz frequency spectrum supporting the 802.11b (2.4GHz, 11Mbps) and the newer, faster 802.11g (2.4GHz, 54Mbps) wireless standards. It's the best way to add wireless capability to your existing wired network, or to add bandwidth to your wireless installation.



To protect your wireless connectivity, it can encrypt all wireless transmissions through 64/128-bit WEP data encryption and also supports WPA. The MAC address filter lets you select exactly which stations should have access to your network. With the Wireless Multi-Client Bridge/Access Point/WDS, you'll experience the best wireless connectivity available today.

Features	Benefits
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
High Output Power up to 26 dBm	Excellent output power spreads the operation distance
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices
Point-to-point, Point-to-multipoint Wireless Connectivity	Let users transfer data between two buildings or multiple buildings
Plug and Play	No driver needed, easy and quick to connect your Ethernet device to Wireless
WPA/WPA2/ IEEE 802.1x support	Powerful data security
Hide SSID (AP Mode)	Avoids unallowable users sharing bandwidth, increases efficiency of the network
DHCP Client/ Server	Simplifies network administration
WDS (Wireless Distributed System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
MAC address filtering (AP Mode)	Ensures secure network connection
Power-over-Ethernet (IEEE802.3af)	Flexible Access Point locations and cost savings

\* 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.

11/16/2006

## Technical Specifications

### Data Rates

1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, 54 Mbps

### Standards

IEEE802.11a/b/g, IEEE802.3, IEEE802.3u, IEEE802.3af, IEEE802.1f, IEEE802.1x

### Compatibility

IEEE 802.11g/ IEEE 802.11b

### Power Requirements

Power Supply: 90 to 240 VDC  $\pm$  10% (depends on different countries)  
Device: 12 V/ 1A

### Status LEDs

LAN: Link, WLAN: Link, Power: on/off

### Regulation Certifications

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

### RF Information

#### Frequency Band

**802.11a:** 5.15~5.25GHz, 5.25~5.35GHz, 5.47~5.725GHz, 5.725~5.825GHz

**802.11b/g:** U.S., Europe and Japan product covering 2.4 to 2.484 GHz, programmable for different country regulations

#### 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)

- 5.15~5.85G(IEEE802.11a)  
6Mbps @ -88dBm;  
54Mbps @ -70dBm

- 2.412~2.472G(IEEE802.11g)  
6Mbps @ -91dBm;  
54Mbps @ -74dBm

- 2.412~2.472G(IEEE802.11b)  
11Mbps @ -90dBm  
1Mbps @ -95dBm

#### Available Transmit Power (Typical)

- 5.15~5.24 GHz(IEEE802.11a)  
17dBm @ 6 ~ 24Mbps  
17dBm @ 36Mbps  
16 dBm @ 48Mbps  
15 dBm @ 54Mbps
- 5.26~5.35GHz(IEEE802.11a)  
20dBm @ 6 ~ 24Mbps  
18dBm @ 36Mbps  
16 dBm @ 48Mbps  
15 dBm @ 54Mbps
- 5.745~5.85GHz (IEEE802.11a)  
18dBm @ 6 ~ 24Mbps  
16dBm @ 36Mbps  
14 dBm @ 48Mbps  
13 dBm @ 54Mbps
- 2.412~2.472G(IEEE802.11g)  
26dBm @ 6 ~ 24Mbps  
23dBm @ 36Mbps  
22 dBm @ 48Mbps  
21 dBm @ 54Mbps
- 2.412~2.472G(IEEE802.11b)  
up to 26 dBm. @ 1, 2, 5.5 and 11Mbps

#### RF Connector

TNC Type (Female Reverse)

#### Networking

##### Topology

Ad-Hoc, Infrastructure

##### Operation Mode

Point-to-Point/ Point-to-Multipoint  
Bridge/ AP/ Client Bridge/ WDS

##### Interface

One 10/100Mbps RJ-45 LAN Port

##### Security

- IEEE802.1x Authenticator / RADIUS Client (EAP-MD5/TLS/TTLS) Support in AP Mode
- IEEE802.1x Supplicant (EAP-MD5/TLS/TTLS, PEAP) support in Client Bridge Mode
- WPA /WPA2/ Pre Share KEY (PSK) with TKIP/AES

- MAC address filtering (AP only)
- Hide SSID in beacons

#### IP Auto-configuration

DHCP client/server

#### Management Configuration

Web-based configuration (HTTP)  
Telnet Configuration  
SNMP V1,

#### Firmware Upgrade

Upgrade firmware via web-browser

#### Environmental

##### Temperature Range

Operating: 0°C to 45°C (32°F to 113°F)  
Storage: -40°C to 70°C (-40°F to 158°F)

##### Humidity (non-condensing)

5%~95% Typical

#### Package Contents

One Multi-Client/AP/WDS  
One Power Adapter  
One CAT5 UTP Cable  
One Quick Start Guide  
One CD-ROM with User's Manual

#### Related Product(s)

11a/b/g High-power Wireless USB Adapter  
NUB-362 (802.11b/g)  
NUB-862 (802.11a/b/g)  
NUB-8310 (802.11a/b/g)  
11b High-power Client Bridge  
2611CB3+(Deluxe)  
11b Outdoor AP-Client  
2611CB5+  
11g Outdoor AP-Client  
NOC-3220 Series  
NOC-3610 Series  
11g Indoor AP-Client  
NCB-3220 Series

\* 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.

11/16/2006