# PRODUCT DATASHEET

Wireless Multi-Client Bridge/AP/ WDS 2.4&5GHz 802.11 a/b/g

NCB-8610 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)/ 802.11a (5GHz, 54Mbps) wireless standards.

NCB-8610 has high transmitted output power and high receivable sensitivity. High output power and high sensitivity can extend range and coverage to reduce the roaming between APs to get more stability wireless connection. It also can reduce the expense of equipment in the same environment.



To protect your wireless connectivity, NCB-8610 can encrypt all wireless transmissions through 64/128-bit WEP data encryption and also supports WPA2/WPA/802.1x for powerful security authentication.

The MAC addresses filter lets you select exactly which stations should have access to your network.

| 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 in 11b/g                      | 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<br>Connectivity | Let users transfer data between two buildings or multiple buildings             |
| WPA2/WPA/ 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   |
| SNMP/Telnet Remote Configuration<br>Management               | Help administrators to remotely configure or manage the Access Point easily.    |
| Power-over-Ethernet (IEEE802.3af)                            | Flexible Access Point locations and cost savings                                |

<sup>\*</sup> 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.

<sup>\*\*</sup> All specifications are subject to change without notice.

# **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 802.11a/ IEEE 802.11g/ IEEE 802.11b

# **Power Requirements**

Power Supply: 90 to 240 VDC ± 10% (depends on different countries)

Device: 12 V/ 1A

Ethernet POE in: 36~57VDC for 802.3af

### **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**

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 ~ 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 WPA/WPA2 supplicant support in Client Bridge mode WPA2/WPA / Pre-share Key (PSK)/ AES/TKIP MAC address filtering (AP mode) 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 webbrowser

# **Environmental**

# **Temperature Range**

Operating: -10°C to 50°C (14°F to 132°F) Storage: -40°Cto 70°C (-40°F to 158°F)

## **Humidity (non-condensing)**

5%~95% Typical

# **Package Contents**

One Client Bridge/AP
One Power Adapter
One CAT5 UTP Cable
One Dual Band Antenna
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

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