ECB-9500

11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

ECB9500 is a powerful and multi-functioned 11n product with 7 major multi-functions, is designed to operate in every working environment for enterprises.

ECB9500 is a Wireless Network device that delivers up to 6x faster speeds and 7x extended coverage than 802.11g devices. ECB9500 supports home network with superior throughput, performance and unparalleled wireless range. With user-friendly WPS function, it helps users to connect to wireless device simply with a one-push button.

To protect data during wireless transmissions, ECB9500 encrypts all wireless transmissions through WEP data encryption and supports WPA/WPA2. ECB9500 also supports IEEE 802.1x Supplicant function in CB mode. Its MAC address filter allows users to select stations with access to connect network. In addition, the function of user isolation protects private network between client users. ECB9500 thus is the best product to ensure network safety for enterprises.

Package Content

- ➢ 1* 11N multi-function Gigabit Client Bridge (ECB9500)
- ➢ 1* 12V/1A Power Adapter
- ➢ 1* Ethernet Cable
- ➢ 3* 5dBi 2.4GHz Dipole Antennas
- ➢ 1*QIG
- ➢ 1*CD (User's Manual)

4Gon   www.4Gon.co.uk   info@4gon.co.uk   Tel: +44 (0)1245 808295   Fax: +44 (0)1245 808299

ECB-9500
11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

Features	Benefits
High Speed Data Rate Up to 300Mbps	Capable of handling heavy data payloads such as MPEG video streaming
Gigabit Ethernet	Support up to 1000Mbps networking speed
IEEE 802.11n draft Compliant and backward compatible with 802.11b/g	Fully compatible with IEEE 802.11b/g/n devices
Multi-Function, 7 functions	Allowing users to select different mode in various environment
Point-to-point, Point-to-multipoint Wireless Connectivity	Allowing to transfer data from buildings to buildings
WDS (Wireless Distributed System)	Making wireless AP and Bridge mode simultaneously as a wireless repeater
Universal Repeater	The easiest way to your wireless network's coverage
Support Multi-SSID function (4 SSID) in AP mode	Allowing clients to access different networks through a single access point and to assign different policies and functions for each SSID by manager
WPA2/WPA/ IEEE 802.1x support	Powerful data security
802.1x Supplicant support (CB & CR mode)	More powerful data security in Client Bridge mode
MAC address filtering in AP mode	Ensuring secure network connection
User isolation support (AP mode)	Protecting the private network between client users.
PPPoE function support (CR mode)	Easy to access the internet via ISP service authentication
Power-over-Ethernet (IEEE802.3af)	Flexible Access Point locations and saving cost
Keep personal setting	Keeping the latest setting when firmware upgrade

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

** All specifications are subject to change without notice.

ECB-9500

11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

SNMP Remote Configuration Management	Helping administrators to remotely configure or manage the Access Point easily
QoS (WMM) support	Enhancing user performance and density
WPS push button	WiFi Protected setup within 3 steps to setup the AP easily

4Gon   www.4Gon.co.uk   info@4gon.co.uk   Tel: +44 (0)1245 808295   Fax: +44 (0)1245 808299

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

** All specifications are subject to change without notice.

ECB-9500

11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

Technical Specifications

Hardware Specifictions

Expansion Slots	N/A
Physical Interface	● LAN: One 10/100/1000Mbps ● Reset Button ● Power Jack ● WPS push button (Wi-Fi Protected Setup)
LEDs Status	● Power/ Status ● LAN (10/100/1000Mbps) ● WLAN (Wireless Connection)
Power Requirements	● Power Supply: 90 to 240 VDC ± 10%, 50/60 Hz (depends on different countries) ● Active Ethernet (Power over Ethernet, IEEE802.3af)- 48 VDC/0.375A ● Device: 12V/1A
Regulation Certifications	● FCC Part 15/UL, CE

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

** All specifications are subject to change without notice.

ECB-9500

11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

> ## RF Specification

Frequency Band	2.400 ~ 2.484 GHz
Media Access Protocol	Carrier sense multiple access with collision avoidance (CSMA/CA)
Modulation Technology	- OFDM: BPSK, QPSK, 16-QAM, 64-QAM - DBPSK, DQPSK, CCK
Operating Channels	11 for North America, 14 for Japan, 13 for Europe

Receive Sensitivity (Typical)	- IEEE802.11n
	    MCS8 @ -91dBm
	    MCS15 @ -74dBm
	- IEEE802.11g (3RX)
	    6Mbps@ -92dBm
	    54Mbps@ -75dBm
	- IEEE802.11b (1RX)
	    1Mbps@ -93dBm
	    11Mbps@ -91dBm

Available transmit power	- IEEE802.11n/g
	    19dBm@6~9 Mbps / MCS9
	    18dBm@12~18 Mbps / MCS11
	    17dBm@24~36 Mbps / MCS13
	    16dBm@48~54 Mbps / MCS15
	- IEEE802.11b
	    18dBm@1, 11Mbps

Antenna *3	Omni-directional external antenna TNC type; Peak Gain = 5 dBi (Reverse)

● **Antenna Specification**

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

** All specifications are subject to change without notice.

ECB-9500

11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

| Electrical Properties	Impedance	50 ohm
	Frequency Range	0~6 GHz
	V.S.W.R	1.5 (Max.)
	Working Voltage	≤ 500 Vrms
	Dielectric Withstanding Voltage	≤ 1500 Vrms
	Insulation Resistance	≥ 5000 Megohms
	Contact Resistance	Center contact: 1.5 Milliohms (Max.) Outer contact: 0.2 Milliohms (Max.)

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

** All specifications are subject to change without notice.

● Antenna Radiation Patterns

E-Plan
2.4 GHz
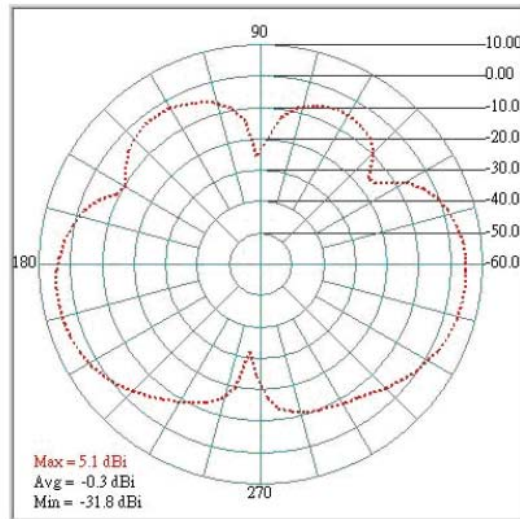
H-Plan
2.4 GHz
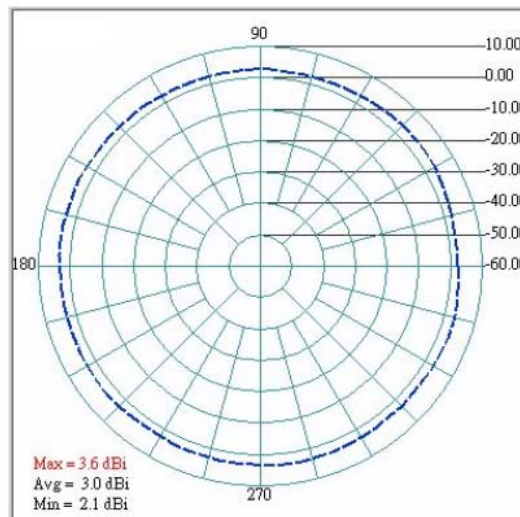
* Theoretical wireless signal rate based on IEEE standard of 802.11b, g, chipset used. Actual throughput may vary.
Network conditions and environmental factors lower actual throughput rate.

** All specifications are subject to change without notice.

ECB-9500

11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

Software Features

Topology	Infrastructure
Operation Mode	Client Bridge / Access Point / WDS AP / WDS Bridge / Client Router / Router / Universal Repeater
LAN	DHCP Server DHCP Client
Wireless	Wireless Mode – 11b / 11g / 11n / Disable Transmission Rate ➢ 11 b/g: 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps ➢ 11n:

MCS Index	Guard Interval 800ns		Guard Interval 400ns	
	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
8	13	27	14.4	30
9	26	54	28.9	60
10	39	81	43.3	90
11	52	108	57.8	120
12	78	162	86.7	180
13	104	216	115.6	240
14	117	243	130	270
15	130	270	144.4	300

Signal Strength

Bandwidth Selection- 40/20 MHz for 11n

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

** All specifications are subject to change without notice.

Security	WEP Encryption-64/128 bit
	WPA Personal (WPA-PSK using TKIP or AES)
	WPA Enterprise (WPA-EAP using TKIP)
	802.1x Authenticator
	802.1x Supplicant- MD5/TTLS (CB & CR mode)
	Hide SSID in beacons
	Multiple SSID with 802.1q VLAN tagging (up to 4 SSIDs) in AP mode
	MAC Filter(AP mode)
	WLAN L2 isolation(AP mode)
	Wireless STA (Client) connected list (Idle/Connection Time, Pkt statistics)
QoS	WMM

Management

Configuration	Web-based configuration HTTP / Telnet
Firmware Upgrade	Upgrade firmware via web-browser Keep latest setting when f/w update
Administrator Setting	Administrator password change
Reset Setting	Reboot (press 1 second) Reset to Factory Default (press 10 second)
System monitoring	Status, Statistics and Event Log
SNMP	v1, v2c
MIB	MIB I, MIB II (RFC1213) and Private MIB
Traffic Measurement	Per interface
Bandwidth Measurement	IP range and bandwidth management
Backup & Restore	Settings through Web

Environment & Physical

4Gon   www.4Gon.co.uk   info@4gon.co.uk   Tel: +44 (0)1245 808295   Fax: +44 (0)1245 808299

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

** All specifications are subject to change without notice.

ECB-9500
11N Multi-Function Gigabit Client Bridge

2.4GH/ 2Tx3R 11N	300Mbps	Client Bridge/AP/ WDS/Repeater

Temperature Range	Operating: 0°C to 45°C (32°F to 113°F) Storage: -20°C to 70°C (-4°F to 158°F)
Humidity (non-condensing)	5% ~ 95% typical
Dimensions	125mm (L) x 108mm (W) x 31mm (H)
Weight	350g

V3.0

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

** All specifications are subject to change without notice.