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ECB3500

Wireless Long Range Multi-function 7+1 AP
(Access Point/Client Bridge/Repeater/WDS AP/ WDS Bridge/ Client Router/AP Router)

- 2.4 GHz
- Super G
- 108Mbps
- EIRP up to 2000mW

PRODUCT DESCRIPTION

ECB3500 is a powerful, enhanced, enterprise level product supports 7 multi-functions to operate for every kind of working environment.

It supports high transmit output power and high data rate which plays different roles of ***Access Point/ Client Bridge / Repeater / WDS AP / WDS Bridge / Client Router / AP Router***. It operates seamlessly in the 2.4 GHz frequency spectrum supporting the 802.11b (2.4GHz, 11Mbps) and super high speed of 802.11g (2.4GHz, 108Mbps) wireless standards. It supports different output power level settings, bandwidth selection, and RSSI indicator which enable the best transmitting and receiving signal for traffic communication.

For more sensitive security requirements, ECB3500 can encrypt all wireless transmissions through WEP data encryption and WPA/WPA2. ECB3500 also supports IEEE 802.1x Supplicant function in CB mode, and authenticator in AP mode. Those are the enhanced securities in AP/CB mode. The MAC address filter lets you select any stations should have access to your network. The User isolation function could protect the private network between client users.
With ***MSSID*** and ***VLAN*** support, it allows networks administrator to segregate different services or applications to different designated users, making it more scalable.

*Theoretical wireless signal rate based on IEEE standard of 802.11 a, b, g, n 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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Datasheet
ECB3500

Features	Benefits
Super G solution up to 108Mbps	Capable of handling heavy data payloads such as MPEG, video streaming, large file transfer and VoIP
Total EIRP up to 2000mW	Extended excellent Range and Coverage (fewer APs)
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices
Narrow Bandwidth Support	5/10/20MHz selection for long range transmission
7+1 Multi Functions	Access Point/Client Bridge/Repeater/WDS AP/ WDS Bridge/Client Router/AP Router
Point-to-multipoint Wireless connectivity	Let users transfer data between two buildings or multiple buildings
WDS (Wireless Distributed System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
Repeater	The easiest way to expand your wireless networking coverage
Support Multi-SSID function (4 SSID) in AP mode (BSSID)	Allow clients to access different networks through a single access point and assign different policies and functions for each SSID by manager
Antenna diversity support	Enhance the traffic signal
WPA2/WPA/ IEEE 802.1x support	Powerful data security
802.1x Supplicant support (CB mode)	More sensitive data security in Client Bridge mode
MAC address filtering in AP mode(up to 50)	Ensure the security of network connections

TECHNICAL SPECIFICATION	
> Hardware Specification	
Expansion Slots	N/A
Physical Interface	□ LAN: One 10/100 Fast Ethernet RJ-45 □ Reset Button □ Power Jack
LEDs Status	□ Power/ Status □ LAN (10/100Mbps) □ 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, CE
> RF Specification	
Frequency Band	2.400～2.484 GHz

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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)	⌘ IEEE802.11g 6Mbps@ -92dBm 54Mbps@ -74dBm ⌘ IEEE802.11b 1Mbps@ -97dBm 11Mbps@ -89dBm	
Available transmit power	⌘ IEEE802.11g 19dBm@54Mbps ⌘ IEEE802.11b 19dBm@1 ~ 11Mbps	
Antenna *2	Detachable omni antenna TNC type; Peak Gain = 5dBi (Reverse)	
> **Antenna Specification**		
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 Vmrs
	Insulation Resistance	5000 Megohms
	Contact Resistance	Center contact : 1.5 Milliohms (Max.) Outer contact : 0.2 Milliohms (Max.)
Antenna Radiation Pattern		

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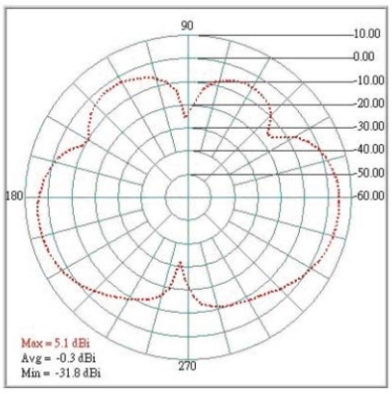
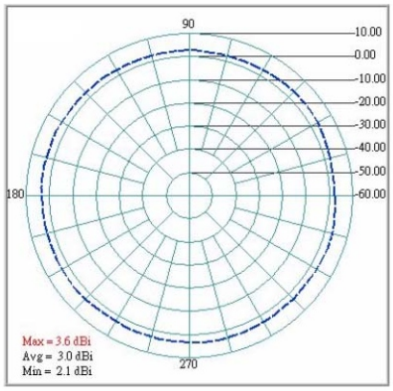
E-Plan 2.4 GHz  H-Plan 2.4 GHz 	
External Antenna	2 x SMA connector (for 2.4GHz and 5GHz individually)

SOFTWARE FEATURES	
> Settings	
Topology	Infrastructure
Operation Mode	Access Point/Client Bridge/Repeater/WDS AP/ WDS Bridge/Client Router/AP Router
LAN	DHCP Server DHCP Client
WAN (Client Router /AP Router mode)	PPPoE
Router	NAT/ NAPT
VPN	VPN pass-through (PPTP, L2TP, IPSEC)
Wireless	Wireless Mode – 11b / 11g / Super G Channel Selection (Setting varies by Country) Transmission Rate 11 b/g: 108, 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps Transmit output power control Signal Strength Narrow Band Selection
Security	WEP Encryption-64/128/152 bit WPA Personal (WPA-PSK using TKIP or AES) WPA Enterprise (WPA-EAP using TKIP) 802.1x Authenticator (AP mode) 802.1x Supplicant- TTLS (CB mode) Hide SSID in beacons Multiple SSID with 802.1q VLAN tagging (up to 4 SSIDs)(AP mode) MAC Filter(AP mode) L2 isolation(AP mode) Wireless STA (Client) connected list Lock to AP MAC (CB mode)

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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 5 seconds)
System monitoring	Status, Statistics and Event Log
SNMP	V1, V2c
MIB	MIB I, MIB II
Backup & Restore	Settings through Web

ECB3500 7 FUNCTIONS

01.AP MODE

The most basic mode of multi-function Access Point. In this mode, the AP will act as a central hub for different Wireless LAN clients. Some hotsports APs requires 802.1x authenticator function to authenticate a user before providing internet service.

02.CLIENT MODE

Also known as Ethernet Client. In this mode, AP will act as a WLAN card to connect with remote AP. Users can connect PC or local LAN to the Ethernet port of the client mode AP. This mode is mostly used as a CPE device for WISP subscriber service.

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03.ROUTER MODE
The LAN port will behave as a WAN port for wired connection to ADSL or Cable modem. The NAT routing will be performed between the WAN and LAN port. Making IP sharing possible.

04.BRIDGE MODE
In This mode, 2 access points is being connected to provide a wireless bridge between 2 remote LANs. It is mostly used by enterprise to connect 2 remote office's network together. The bridge mode is connected by using either the WDS (Wireless Distributed System) or ADHOC topology.

05.UNIVERSAL REPEATER
A universal repeater extends the wireless coverage of another wireless AP or router. The advantage of the universal repeater is that the remote device does not need to have WDS function and may not need to be the same brand or make. Therefore, it can work with almost any wireless device.

06.WDS
This function extends wireless range of another wireless AP. For WDS repeater to work, the remote wireless AP must also support WDS function and in some cases only works with the same brand and make. The function may support token ring and star topology with the spanning tree protocol.

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07.WISP(CLIENT ROUTER) MODE

In WISP mode, the AP will behave as Client. In addition, router function is added between the wireless WAN side and the Ethernet LAN side. Therefore, the WISP subscriber can share the WISP connection without the need of extra router.

ENVIRONMENT AND MECHANICAL	
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

PACKAGE CONTENT
▶ 1 x Wireless long range multi-7+1 AP (ECB3500)
▶ 1 x Power Adaptor (12V/1A)
▶ 1 x CD with User's Manual
▶ 1 x QIG
▶ 1 x CAT5 UTP Cable
▶ 2 x 5dBi 2.4GHz Dipole Antenna

Contact

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