



<b>ECB-1221R</b>		
Wireless Long Range Multi-function Client Bridge		
2.4 GHz	EIRP up to 400mW	Access Point/Client Bridge/Repeater/Client Router



**ECB1221R** is a powerful client bridge. It supports several networking activities of Client Bridge/ Client Router/ Access Point / Repeater operating seamlessly in the 2.4 GHz frequency wireless standards. It's the best way to add wireless capability to your existing wired network, or to add bandwidth to your wireless installation.

With high output power and high gain antenna, it enhances the transmit output power up to 400mW. Also, the sensitivity is industrial best which enables the throughput performance keeps at high data rate and farther distance.

To protect your wireless connectivity, it can encrypt all wireless transmissions through 64/128-bit WEP data encryption and also supports WPA/WPA2. The MAC address filter lets you select exactly which stations should have access to your network. User isolation function can protect the private network between client users.

#### **Package Content**

- 1\* Wireless long range multi-function client bridge (1221R)
- 1\* 12V/1A Power Adapter
- 1\* CAT5 UTP Cable
- 1\* QIG
- 1\* CD (User's Manual)
- 1\* 2dBi 2.4GHz Dipole Antenna

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Features	Benefits
High Speed Data Rate Up to 54Mbps	Capable of handling heavy data payloads such as MPEG video streaming
Total EIRP up to 400mW	Excellent output power spreads the operation distance
Client Bridge mode Repeater mode	The easiest way to expand your wireless network's coverage
Point-to-point, Point-to-multipoint Wireless 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
User isolation support (AP mode)	Protect the private network between client users.
PPPoE function support (CR mode)	Easy to access internet via ISP service authentication
Keep personal setting	Keep the latest setting when firmware upgrade
IEEE 802.11b/g Compliant	Fully Interoperable with IEEE 802.11b/IEEE802.11g compliant devices

### Technical Specifications

#### Hardware Specifications

Expansion Slots	N/A
Physical Interface	<ul style="list-style-type: none"> <li>• LAN: One 10/100 Fast Ethernet RJ-45</li> <li>• Reset Button</li> <li>• Power Jack</li> <li>• RF Connector (SMA)</li> </ul>

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2.4 GHz

EIRP up to 400mW

Access Point/Client  
Bridge/Repeater/Client  
Router

LEDs Status	<ul style="list-style-type: none"> <li>• Power/ Status</li> <li>• WAN ( 10/100Mbps)</li> <li>• LAN (10/100Mbps)</li> <li>• WLAN (Wireless Connection)</li> </ul>
Power Requirements	<ul style="list-style-type: none"> <li>• Power Supply: <ul style="list-style-type: none"> <li>• 200 to 240 VDC <math>\pm</math> 10% (ETSI)</li> <li>• 100 to 120 VDC <math>\pm</math> 10% (FCC)</li> </ul> </li> <li>• Device: 12V/1A</li> </ul>
Regulation Certifications	<ul style="list-style-type: none"> <li>• FCC Part 15, CE</li> </ul>

## ➤ RF Specification

Frequency Band	2.400 ~ 2.484 GHz
Media Access Protocol	Carrier sense multiple access with collision avoidance (CSMA/CA)
Modulation Technology	<ul style="list-style-type: none"> <li>• OFDM: BPSK, QPSK, 16-QAM, 64-QAM</li> <li>• DBPSK, DQPSK, CCK</li> </ul>
Operating Channels	11 for North America, 14 for Japan, 13 for Europe
Receive Sensitivity (Typical)	<ul style="list-style-type: none"> <li>• IEEE802.11g 6Mbps@ -85dBm 54Mbps@ -68dBm</li> <li>• IEEE802.11b 1Mbps@ -90dBm 11Mbps@ -84dBm</li> </ul>
Available transmit power	<ul style="list-style-type: none"> <li>• IEEE802.11g 17dBm@54Mbps</li> <li>• IEEE802.11b 24dBm@1 ~ 11Mbps</li> </ul>
Antenna *1	Detachable dipole antenna SMA type; Peak Gain = 2dBi

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• **Software Features**

➤ **Setting**

Topology	Infrastructure/Ad-Hoc
Operation Mode	Access Point/Client Bridge/Repeater/ Client Router
LAN	<ul style="list-style-type: none"> <li>•DHCP Server</li> <li>•DHCP Client</li> </ul>
WAN (Client Router mode)	<ul style="list-style-type: none"> <li>•PPPoE</li> </ul>
Router	NAT/ NAPT
VPN	VPN pass-through (PPTP, L2TP, IPSEC)
Wireless	Wireless Mode – 11b / 11g / Auto <ul style="list-style-type: none"> <li>•Auto Channel Selection</li> <li>•Transmission Rate               <ul style="list-style-type: none"> <li>➤ 11 b/g: 108, 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 in Mbps</li> </ul> </li> </ul>
Security	<ul style="list-style-type: none"> <li>•WEP Encryption-64/128/152 bit</li> <li>•WPA / WPA2 Personal (WPA-PSK using TKIP or AES)</li> <li>•WPA / WPA2 Enterprise (WPA-EAP using TKIP)</li> <li>•802.1x Authenticator / Radius Client (AP mode)</li> <li>•MAC address filtering</li> <li>•Hide SSID in beacons</li> <li>•User isolation</li> <li>•NAT in CR mode</li> </ul>
QoS	<ul style="list-style-type: none"> <li>•WMM</li> </ul>

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➤ **Management**

Configuration	Web-based configuration (HTTP)/Telnet
Firmware Upgrade	<ul style="list-style-type: none"> <li>• Upgrade firmware via web-browser</li> <li>• Keep latest setting when f/w update</li> </ul>
Administrator Setting	Administrator password change
Reset Setting	<ul style="list-style-type: none"> <li>• Reboot (press 1 second)</li> <li>• Reset to Factory Default (press 5 seconds)</li> </ul>
System monitoring	Status, Statistics and Event Log
Backup & Restore	Settings through Web

• **Environment & Physical**

Temperature Range	<ul style="list-style-type: none"> <li>• Operating: 0°C to 45°C (32°F to 113°F)</li> <li>• Storage: -20°C to 70°C (-4°F to 158°F)</li> </ul>
Humidity (non-condensing)	5% ~ 95% typical

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