

This is a dual-radio High Power and High Gain Access Point/Client Bridge that operates seamlessly in the 2.4 GHz/5 GHz frequency spectrum and the newer, faster 802.11a (5GHz, 54Mbps) and 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 will 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 36 dBm (with 16dBi Antenna Gain) for 11a	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
WPA/WPA2/ IEEE 802.1x support	Powerful data security
WDS (Wireless Distribution System)	Make wireless AP and Bridge mode simultaneously as a wireless repeater
Hide SSID (AP Mode)	Avoids unallowable users sharing bandwidth, increases efficiency of the network
DHCP Client/ Server	Simplifies network administration
Watertight and Weatherproof (IP67)	Avoid water invaded and weather corroded
Wide temperature range and robust mechanical design	Delivers reliable, top performance in the most demanding environments
Power-over-Ethernet (IEEE802.3af Compliant)	Flexible Access Point locations and cost savings

\*\* Subject to change without prior 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 802.11g/ IEEE 802.11b

### Power Requirements

Active Ethernet (Power over Ethernet) –48 VDC/0.375A

External Unit: Auto sensing 100/240 VAC; 50/60 Hz

### 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

**802.11b/g:**  
 11 for North America, 14 for Japan, 13 for Europe,  
 2 for Spain, 4 for France

### 802.11a:

US/Canada:12 non-overlapping channel (5.15–5.35GHz, 5.725–5.825GHz)  
 Europe:19 non-overlapping channel (5.15–5.35GHz, 5.47–5.825GHz)

Japan: 4 non-overlapping channel (5.15–5.25GHz)

China: 5 non-overlapping channel (5.725–5.85GHz)

### 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

### Antenna

802.11a: Embedded patch antenna  
 16dBi (5GHz)  
 802.11b/g: SMA connector 5dBi (2.4GHz)

## NETWORKING

### Topology

Ad-Hoc, Infrastructure

### Operation Mode

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

### Interface

Wireless IEEE802.11b/g  
 One 10/100 RJ-45 port

## Security

- IEEE802.1x Authenticator RADIUS Client (EAP-MD5/TLS/TTL) Support in AP Mode
- IEEE802.1x Supplicant (EAP-MD5/TLS/TTL, 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  
 Serial Interface (RS-232)

## PHYSICAL

### Dimensions (HxWxD)

163.8(L)mm \* 135.2(W)mm \*  
 47.0(H)mm

### Weight

1.2 Kg (2.6 lbs)

## ENVIRONMENT

### Temperature Range

Operating: 0°C to 65  
 Storage: -40°C to 80°

### Humidity (non-condensing)

5%–95% Typical

### Package Contents

- Outdoor Wireless Client Bridge unit
- 48V, 0.375A AC/DC adapter with wall-plug power code
- 14dBi Dipole Antenna
- Inline Power Injector (PoE)
- 1.8m Grounding Cable
- User manual CD-disc
- Wall mounting kit
- Mast mounting kit

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