

Wireless 11a/b/g Outdoor Device			EOC-5610
2.4GHz / 5GHz	54Mbps	802.11a/b/g	24V PoE

EOC-5610 is a long range outdoor wireless Access Point / Client Bridge that operates seamlessly in both **5GHz and 2.4GHz** frequency. It provides high bandwidth up to 108Mbps with Super Mode (SuperA|G) and features high transmitted output power as well as superior sensitivity. EOC-5610 extends radio coverage, avoids unnecessary roaming between Access Points and ensures a stable wireless connection while reduces the number of required equipments.

EOC-5610 supports user friendly interface including distance control (ACK Timeout) ranges from 1KM up to 30KM and RSSI LED indicator offering real time signal status. It also supports PoE injector for convenient outdoor installation.

EOC-5610 ensures wireless transmission security with full support of encryption mechanism including 64/128-bit WEP, WPA and WPA2.

The design, high performance, and array of features make EOC-5610 a suitable wireless solution for both residence or office.



Package Content

- 1* Wireless 802.11a/b/g Outdoor Device(EOC-5610)
- 1* PoE Injector (EPE-1212)
- 1* Power Adaptor(24V/0.6A)
- 1* CD with User's Manual
- 1* QIG
- 1* Metal strap
- 1* Special screw set

* 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.

Features

Wireless

- **5GHz / 2.4GHz** It works in 5GHz / 2.4GHz frequency spectrum
- **High output power** Transmit output power programmable for different country selections
- **High Data Rate** High speed transmitting rate up to 108Mbps with Super Mode, supports large payload such as MPEG video streaming
- **Multifunction application** Access Point/**Client Bridge**/Client Router
- **Long range transmitting** Transmit power control and distance control (ACK timeout)
- **Signal Strength** LED indicators have the best transmit and receive signal for traffic communication

Networking

- **Public wireless solution** An AP interface that is especially useful in public areas such as hotspots and enterprise
- **Signal Strength Display** RF signal strength status shown LEDs of 3 colors, making network build-up easier
- **QoS(WMM)** Enhance performance and density

Security

- **802.11i** WEP, WPA, WPA2 (Encryption support TKIP/AES)
- **MAC address functions** MAC address filter (AP mode)
- **802.1x** IEEE802.1x Authenticator
- **L2 isolation**
- **Station isolation**

Management

- **Firmware Upgrade** Upgrading firmware via web browser, setting are reserved after upgrade
- **Reset & Backup** Reset to factory default. User can export all setting into a file via WEB
- **MIB** MIB I, MIB II(RFC1213)
- **SNMP** V1, V2c

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Technical Specifications

Hardware Specification	
MCU/RF	Atheros AR2313+AR5112
Memory	32MB SDRAM
Flash	8MB
Physical Interface	One 10/100 Fast Ethernet RJ-45 Reset Button 2 x SMA Connector
LED indicators	Power/ Status LAN (10/100Mbps) WLAN (Wireless is up) 3 x Link Quality (Client Bridge mode) <ul style="list-style-type: none"> • Green: Good Quality • Yellow: Marginally Acceptable Quality • Red: Bad Quality
Power Requirements	Active Ethernet (Power over Ethernet) Proprietary PoE design Power Adapter 24V / 0.6A DC
Regulation Certifications	FCC Part 15C/15B, EN 300 328/EN 301 489-1/-17

RF Specification																													
Frequency Band	802.11a = 5.150~5.350GHz, 5.470~5.725GHz, 5.725~5.825GHz 802.11b/g = 2.412~2.472GHz																												
Modulation Technology	OFDM = BPSK, QPSK, 16-QAM, 64-QAM DSSS = DBPSK, DQPSK, CCK																												
Operating Channels	802.11a = See the Table1 802.11b/g = 11 for North America, 14 for Japan, 13 for Europe																												
Receive Sensitivity (Typical)	802.11a -88dBm @ 6Mbps, -70dBm @ 54Mbps	802.11g -92 dBm @ 6Mbps, -75 dBm @ 54Mbps	802.11b -93 dBm @ 1Mbps -91 dBm @ 11Mbps																										
Available transmit power (Average power)	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <thead> <tr> <th colspan="2">FCC</th><th colspan="2">ETSI</th></tr> <tr> <th>Frequency</th><th>Power</th><th>Frequency</th><th>Power</th></tr> </thead> <tbody> <tr> <td rowspan="4">5.150~5.350 GHz IEEE802.11a</td><td>27dBm@6~24Mbps</td><td rowspan="4">5.150~5.350 GHz IEEE802.11a</td><td>27dBm@6~24Mbps</td></tr> <tr> <td>25dBm@36Mbps</td><td>25dBm@36Mbps</td></tr> <tr> <td>24dBm@48Mbps</td><td>24dBm@48Mbps</td></tr> <tr> <td>23dBm@54Mbps</td><td>23dBm@54Mbps</td></tr> <tr> <td rowspan="3">5.470~5.725 GHz IEEE802.11a</td><td>27dBm@6~24Mbps</td><td rowspan="3">5.470~5.725 GHz IEEE802.11a</td><td>27dBm@6~24Mbps</td></tr> <tr> <td>25dBm@36Mbps</td><td>25dBm@36Mbps</td></tr> <tr> <td>24dBm@48Mbps</td><td>24dBm@48Mbps</td></tr> </tbody> </table>			FCC		ETSI		Frequency	Power	Frequency	Power	5.150~5.350 GHz IEEE802.11a	27dBm@6~24Mbps	5.150~5.350 GHz IEEE802.11a	27dBm@6~24Mbps	25dBm@36Mbps	25dBm@36Mbps	24dBm@48Mbps	24dBm@48Mbps	23dBm@54Mbps	23dBm@54Mbps	5.470~5.725 GHz IEEE802.11a	27dBm@6~24Mbps	5.470~5.725 GHz IEEE802.11a	27dBm@6~24Mbps	25dBm@36Mbps	25dBm@36Mbps	24dBm@48Mbps	24dBm@48Mbps
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	2.412~2.462 GHz IEEE802.11g	27dBm@6~24Mbps 25dBm@36Mbps 24dBm@48Mbps 23dBm@54Mbps	2.412~2.472 GHz IEEE802.11g	27dBm@6~24Mbps 25dBm@36Mbps 24dBm@48Mbps 23dBm@54Mbps
	2.412~2.462 GHz IEEE802.11b	28dBm@1~11Mbps	2.412~2.472 GHz IEEE802.11b	28dBm@1~11Mbps
	Tolerance	±1dBm	Tolerance	±1dBm
Internal Antenna	1 x 5dBi 2.4GHz Panel Antenna + 1 x 13dBi 5GHz Panel Antenna			
External Antenna	2 x SMA connector (for 2.4GHz and 5GHz individually)			

Software Features	
General	
Topology	Infrastructure
Protocol / Standard	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.11b/g (2.4GHz WLAN)
Operation Mode	802.11 a/b/g Access Point Client Bridge Client Router
LAN	DHCP Server DHCP Client
VPN	VPN – pass through
Wireless	Channel Selection (Setting varies by countries) Transmission Rate 11 b/g : 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps Long distance transmission : 1km to 30km (Ack timeout) Transmit power table Signal Strength indication using LEDs PPPoE(CR mode)
Security	WEP Encryption-64/128/152 bit WPA/WPA2 Personal (WPA-PSK using TKIP or AES) WPA/WPA2 Enterprise (WPA-EAP using TKIP) 802.1x Authenticator Hide SSID in beacons

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	MAC address filtering, up to 50 field L2 isolation(AP mode) Wireless STA (Client) connected list
QoS	WMM
Management	
Configuration	Web-based configuration (HTTP)
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, Event Log
SNMP	V1, V2c
MIB	MIB I, MIB II (RFC1213) and Private MIB
Backup & Restore	Settings through Web
Time setting	NTP (Auto-setting of time) Time setting manually

Environment & Mechanical

Temperature Range	Operating -20°C~70°C Storage -30°C to 80°C
Humidity (non-condensing)	0%~90% typical
Dimensions	260mm (L) x 84mm (W) x 55mm (H)
Weight	300g

Table1

(Americas (FCC)):

2.412 to 2.462 GHz; 11 channels
5.180 to 5.320 GHz; 8 channels
5.500 to 5.700 GHz, 8 channels (excludes 5.600 to 5.640 GHz)
5.745 to 5.825 GHz; 5 channels

(China):

2.412 to 2.472 GHz; 13 channels
5.745 to 5.825 GHz; 5 channels

(ETSI):

2.412 to 2.472 GHz; 13 channels
5.180 to 5.320 GHz; 8 channels
5.500 to 5.700 GHz, 11 channels

(Israel):

2.412 to 2.472 GHz, 13 channels
5.180 to 5.320 GHz; 8 channels

(Korea):

2.412 to 2.472 GHz; 13 channels
5.180 to 5.320 GHz; 8 channels
5.500 to 5.620 GHz, 7 channels
5.745 to 5.805 GHz, 4 channels

(Japan2):

2.412 to 2.472 GHz; 13 channels
5.180 to 5.320 GHz; 8 channels

(Singapore):

2.412 to 2.472 GHz; 13 channels
5.180 to 5.320 GHz; 8 channels
5.745 to 5.825 GHz; 5 channels

(Taiwan):

2.412 to 2.462 GHz; 11 channels
5.280 to 5.320 GHz; 3 channels
5.500 to 5.700 GHz, 11 channels
5.745 to 5.825 GHz; 5 channels

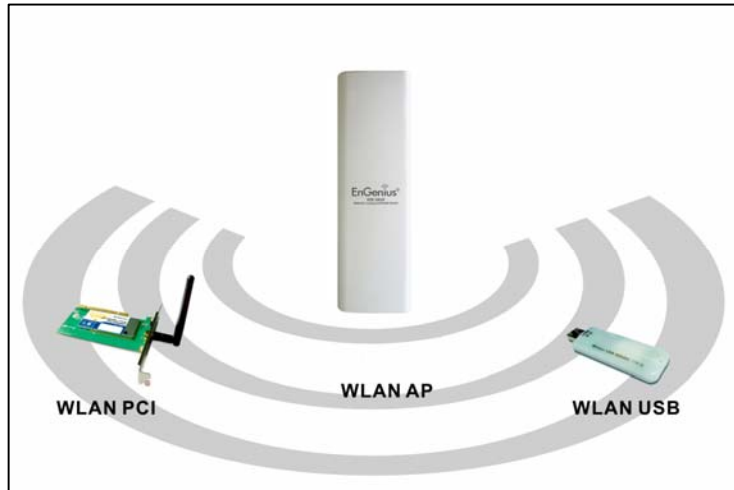
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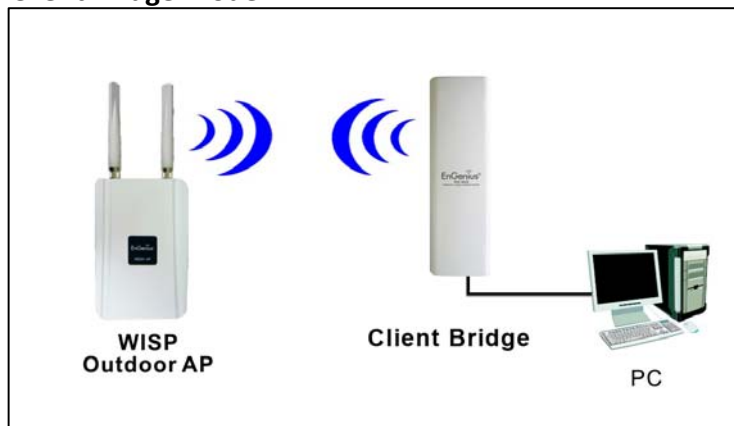
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Application

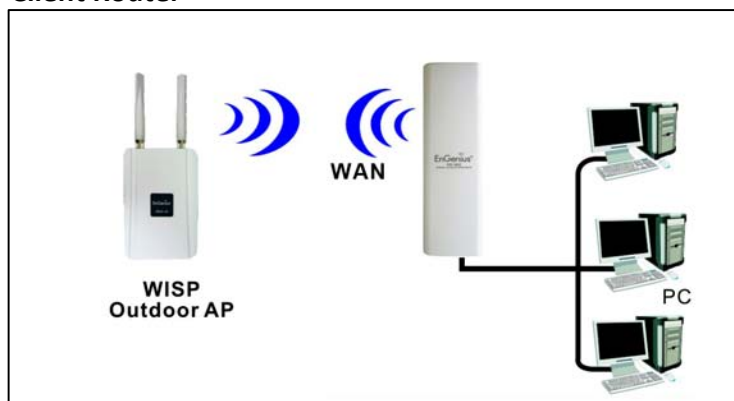
Access Point Mode



Client Bridge Mode



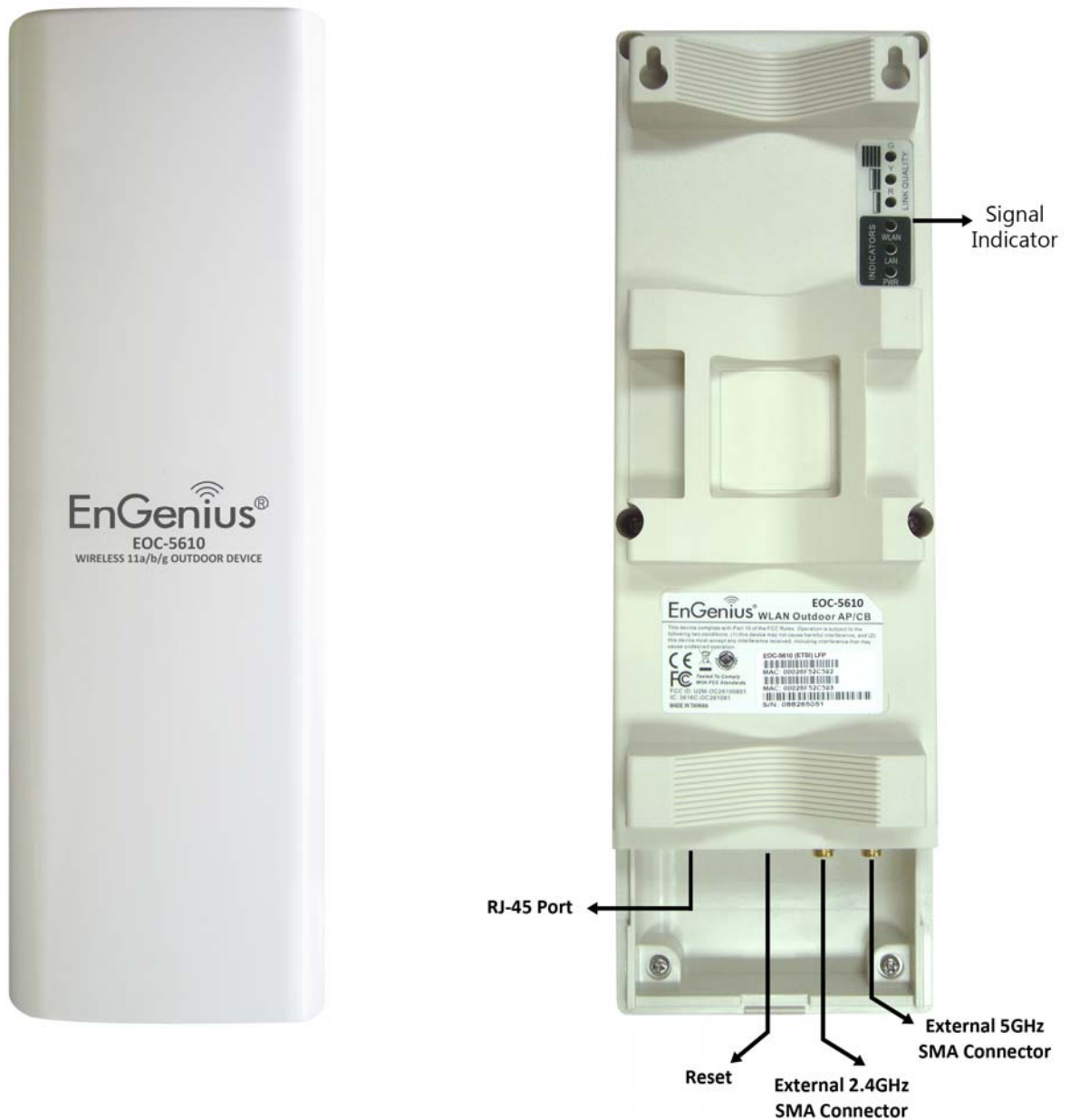
Client Router



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Product ID & Mounting Base



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