

# EOC5611P

## Wireless 802.11 a/b/g Outdoor AP

- 2.4GHz / 5 GHz
- 54Mbps
- 802.11 a/b/g
- 24V PoE



### PRODUCT DESCRIPTION

EOC5611P is a long range outdoor wireless Access Point / Client Bridge that operates in both 5GHz and 2.4GHz frequency. It provides high bandwidth up to 54Mbps and features dual polarization antenna with high transmitted output power as well as superior sensitivity. EOC5611P extends radio coverage, avoids unnecessary roaming between Access Points and ensures a stable wireless connection while reduces the number of required equipments.

EOC5611P provides user friendly interface including user friendly distance control ranges from 1KM up to 30KM and RSSI LED indicator offering real time signal status. It comes with PoE injector for convenient outdoor installation.

EOC5611P enforces transmission security with full support of latest encryption mechanism including 64/128-bit WEP, WPA and WPA2. With 14dBi internal antenna and superior performance, EOC5611P makes an optimal wireless solution for both small and large scale projects.

### Package Content

- 1 x Wireless 802.11a/b/g Outdoor Device(EOC5611P)
- 1 x PoE Injector (EPE-1212)
- 1 x Power Adaptor(24V/1A)
- 1 x CD with User's Manual
- 1 x QIG
- 1 x Metal strap
- 2 x Special screw set

## 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 54Mbps, supports large payload such as video streaming
- **Multifunction application** Access Point/Client Bridge/Client Router/WDS AP/WDS CB
- **Long range transmitting** Transmit power control and distance control (ACK timeout)
- **Signal Strength Display** LED indicators have the best transmit and receive signal for traffic communication. And RF signal strength status shown LEDs of 3 colors, making network build-up easier
- **Narrow Bandwidth** Provide 5MHz/10MHz/20MHz bandwidth selection.
- **Multiple SSID** 4 SSID supported. Each SSID can set itself wireless or WAN access setting.
- **QoS(WMM)** Enhance performance and density

### Networking

- **PPPoE** Point-to-Point Protocol over Ethernet at Client Router mode. This function will keep trying when failed or disconnected
- **PPTP** Point-to-Point Tunneling Protocol (PPTP) is a method for implementing virtual private networks
- **VPN Pass Through**

### Security

- **802.11i** WEP, WPA, WPA2 (Encryption support TKIP/AES)
- **MAC address functions** MAC address filter (AP mode)
- **802.1x** IEEE802.1x Authenticator
- **Station isolation** L2 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), Private MIB
- **SNMP** V1, V2c

TECHNICAL SPECIFICATION																															
<b>&gt; Hardware Specification</b>																															
MCU/RF	Atheros AR2313+AR5112																														
Memory	32MB SDRAM																														
Flash	8MB																														
Physical Interface	1 x 10/100 Fast Ethernet RJ-45 1 x Reset Button 1 x Antenna Switch ( Internal and External Switch ) 2 x SMA Connector ( One is for 2.4GHz and another is for 5GHz )																														
LED indicators	Power/ Status LAN (10/100Mbps) WLAN (Wireless is up) 3 x Link Quality (Client Bridge mode) • Green: Good Quality • Yellow: Marginally Acceptable Quality • Red: Bad Quality																														
Power Requirements	Active Ethernet (Power over Ethernet) Proprietary PoE design Power Adapter 24V / 1A DC																														
Regulation Certifications	FCC Part 15C/15B/15E, EN301 893, EN 300 328, EN 301 489-1/-17, EN60950, IC Certification																														
<b>&gt; RF Specification</b>																															
Frequency Band	<b>802.11a</b> = 5.150~5.350GHz, 5.470~5.725GHz, 5.725~5.825GHz <b>802.11b/g</b> = 2.412~2.472GHz																														
Modulation Technology	OFDM = BPSK, QPSK, 16-QAM, 64-QAM DSSS = DBPSK, DQPSK, CCK																														
Operating Channels	<b>802.11a</b> = See the Table1 <b>802.11b/g</b> = 11 for North America, 14 for Japan, 13 for Europe																														
Receive Sensitivity (Typical)	<b>802.11a</b> -92dBm @ 6Mbps, -73dBm @ 54Mbps	<b>802.11g</b> -92 dBm @ 6Mbps, -75 dBm @ 54Mbps	<b>802.11b</b> -97 dBm @ 1Mbps -91 dBm @ 11Mbps																												
Available transmit power (Average power)	<table border="1"> <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>5.150~5.350 GHz <b>IEEE802.11a</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> <td>5.150~5.350 GHz <b>IEEE802.11a</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> </tr> <tr> <td>5.470~5.725 GHz <b>IEEE802.11a</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> <td>5.470~5.725 GHz <b>IEEE802.11a</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> </tr> <tr> <td>5.725~5.825 GHz <b>IEEE802.11a</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> <td>5.725~5.825 GHz <b>IEEE802.11a</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> </tr> <tr> <td>2.412~2.462 GHz <b>IEEE802.11g</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 23dBm@48Mbps 22dBm@54Mbps</td> <td>2.412~2.472 GHz <b>IEEE802.11g</b></td> <td>26dBm@6~24Mbps 24dBm@36Mbps 23dBm@48Mbps 22dBm@54Mbps</td> </tr> <tr> <td>2.412~2.462 GHz <b>IEEE802.11b</b></td> <td>27dBm@1~11Mbps</td> <td>2.412~2.472 GHz <b>IEEE802.11b</b></td> <td>27dBm@1~11Mbps</td> </tr> </tbody> </table>			FCC		ETSI		Frequency	Power	Frequency	Power	5.150~5.350 GHz <b>IEEE802.11a</b>	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.150~5.350 GHz <b>IEEE802.11a</b>	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.470~5.725 GHz <b>IEEE802.11a</b>	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.470~5.725 GHz <b>IEEE802.11a</b>	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.725~5.825 GHz <b>IEEE802.11a</b>	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.725~5.825 GHz <b>IEEE802.11a</b>	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	2.412~2.462 GHz <b>IEEE802.11g</b>	26dBm@6~24Mbps 24dBm@36Mbps 23dBm@48Mbps 22dBm@54Mbps	2.412~2.472 GHz <b>IEEE802.11g</b>	26dBm@6~24Mbps 24dBm@36Mbps 23dBm@48Mbps 22dBm@54Mbps	2.412~2.462 GHz <b>IEEE802.11b</b>	27dBm@1~11Mbps	2.412~2.472 GHz <b>IEEE802.11b</b>	27dBm@1~11Mbps
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Internal Antenna (Dual Polarization)	Antenna Specification	
	Gain	14dBi
	Radiation	Directional
	Frequency Band Range	5.1-5.8GHz
	Horizontal -3dB Bandwidth	35°
	Vertical -3dB Bandwidth	15°
<b>&gt; Antenna Pattern</b>		
<p style="text-align: center;"><b>Horizontal Azimuth</b></p>		<p style="text-align: center;"><b>Horizontal Elevation</b></p>
<p style="text-align: center;"><b>Vertical Azimuth</b></p>		<p style="text-align: center;"><b>Vertical Elevation</b></p>
External Antenna		2 x SMA connector (for 2.4GHz and 5GHz individually)

SOFTWARE FEATURES	
<b>&gt; General</b>	
Topology	Infrastructure
Protocol / Standard	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.11a/b/g (5GHz/2.4GHz WLAN)
Operation Mode	<b>802.11 a/b/g</b> Access Point Client Bridge Client Router WDS AP/CB
LAN	DHCP Server DHCP Client
VPN	VPN Pass through
Wireless	Channel Selection (Setting varies by countries) Transmission Rate 11 a/b/g : 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps Long distance transmission : 1km to 30km (Ack timeout) Auto Channel Selection Traffic Shaping Transmit power table AP Detection Narrow Bandwidth 5MHz/10MHz/20MHz Support Signal Strength indication using LEDs PPPoE & PPTP ( CR mode ) Preferred SSID MSSID & VLAN Tagging
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 L2 Isolation Hide SSID in beacons MAC address filtering, up to 50 field Wireless STA (Client) connected list
QoS	WMM
<b>&gt; Management</b>	
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)
Backup & Restore	Settings through Web
Time setting	NTP (Auto-setting of time) Time setting manually

ENVIRONMENT AND MECHANICAL	
Temperature Range	Operating -20°C~70°C Storage -30°C to 80°C
Humidity (non-condensing)	0% ~ 95% typical
Dimensions	260mm (L) x 84mm (W) x 55mm (H)
Weight	300g