EOC5611P

Wireless 802.11 a/b/g Outdoor AP

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

Package Contents

- 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

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.

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.

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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 Specifications

Hardware Specification	
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	Active Ethernet (Power over Ethernet) Proprietary PoE design

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Requirements	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

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	802.11g	802.11b
	-92dBm @ 6Mbps, -73dBm @ 54Mbps	-92 dBm @ 6Mbps, -75 dBm @ 54Mbp	-97 dBm @ 1Mbps -91 dBm @ 11Mbps

Available transmit power (Average power)	FCC		ETSI	
	Frequency	Power	Frequency	Power
	5.150~5.350 GHz IEEE802.11a	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.150~5.350 GHz IEEE802.11a	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps
	5.470~5.725 GHz IEEE802.11a	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.470~5.725 GHz IEEE802.11a	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps
	5.725~5.825 GHz IEEE802.11a	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.725~5.825 GHz IEEE802.11a	26dBm@6~24Mbps 24dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps
	2.412~2.462 GHz IEEE802.11g	26dBm@6~24Mbps 24dBm@36Mbps 23dBm@48Mbps 22dBm@54Mbps	2.412~2.462 GHz IEEE802.11g	26dBm@6~24Mbps 24dBm@36Mbps 23dBm@48Mbps 22dBm@54Mbps
	2.412~2.462 GHz IEEE802.11b	27dBm@1~11Mbps	2.412~2.462 GHz IEEE802.11b	27dBm@1~11Mbps

Internal Antenna (Dual Polarization)	Antenna Specification	
	Gain	14dBi
	Radiation	Directional
	Frequency Band Range	5.1-5.8GHz

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	Horizontal -3dB Bandwidth	
	Vertical -3dB Bandwidth	
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 802.11a/b/g (5GHz/2.4GHz WLAN)
Operation Mode	802.11 a/b/g 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

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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)
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%~95% 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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DATASHEET

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