

EOC5510

Wireless 802.11a AP/CB

- 5.0GHz
- 54Mbps
- 802.11a
- 24PoE



PRODUCT DESCRIPTION

EOC5510 is a long range outdoor wireless Access Point / Client Bridge that operates in **5GHz** frequency. It provides high bandwidth up to 54Mbps and features high transmitted output power as well as superior sensitivity. EOC5510 extends radio coverage, avoids unnecessary roaming between Access Points and ensures a stable wireless connection while reduces the number of required equipments.

EOC5510 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.

EOC5510 enforces transmission security with full support of latest encryption mechanism including 64/128-bit WEP, WPA and WPA2. With 8dBi internal antenna which supports dual polarization and superior performance, EOC5510 makes an optimal wireless solution for both small and large scale projects.

FEATURES

Wireless

- **5GHz** It works in 5GHz 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 MPEG video streaming
- **Multifunction application** Access Point/Client Bridge/Client Router/WDS AP/WDS Bridge
- **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
- **Public wireless solution** An AP interface that is especially useful in public areas such as hotspots and enterprise
- **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

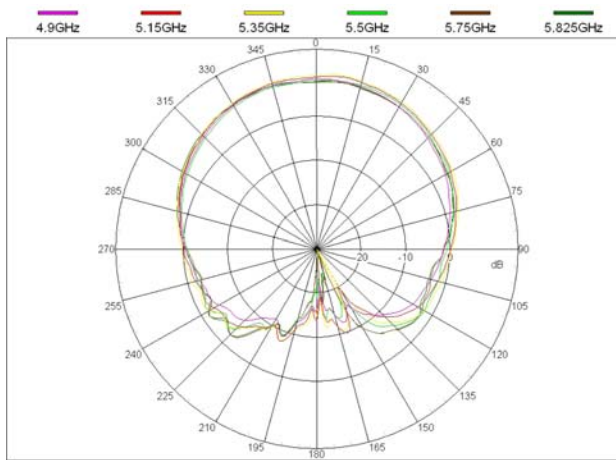
- **Firmware Upgrade** Upgrading firmware via web browser, setting are reserved after upgrade
- **Reset & Backup** Reset to factory default. User can export all setting into a file via WEB
- **MIB** MIB I, MIB II(RFC1213)
- **SNMP** V1, V2c

TECHNICAL SPECIFICATION																					
> 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) 1 x SMA Connector																				
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 / 0.6A DC																				
Regulation Certifications	FCC Part 15E, EN301 893, 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																				
Modulation Technology	OFDM = BPSK, QPSK, 16-QAM, 64-QAM																				
Operating Channels	802.11a = See the Table1																				
Receive Sensitivity (Typical)	802.11a -92dBm @ 6Mbps, -73dBm @ 54Mbps																				
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 IEEE802.11a</td> <td>23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> <td>5.150~5.350 GHz IEEE802.11a</td> <td>23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> </tr> <tr> <td>5.470~5.725 GHz IEEE802.11a</td> <td>23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> <td>5.470~5.725 GHz IEEE802.11a</td> <td>23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> </tr> <tr> <td>5.725~5.825 GHz IEEE802.11a</td> <td>23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> <td>5.725~5.825 GHz IEEE802.11a</td> <td>23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps</td> </tr> </tbody> </table>	FCC		ETSI		Frequency	Power	Frequency	Power	5.150~5.350 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.150~5.350 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.470~5.725 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.470~5.725 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.725~5.825 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.725~5.825 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps
FCC		ETSI																			
Frequency	Power	Frequency	Power																		
5.150~5.350 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.150~5.350 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps																		
5.470~5.725 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.470~5.725 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps																		
5.725~5.825 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps	5.725~5.825 GHz IEEE802.11a	23dBm@6~24Mbps 23dBm@36Mbps 22dBm@48Mbps 20dBm@54Mbps																		

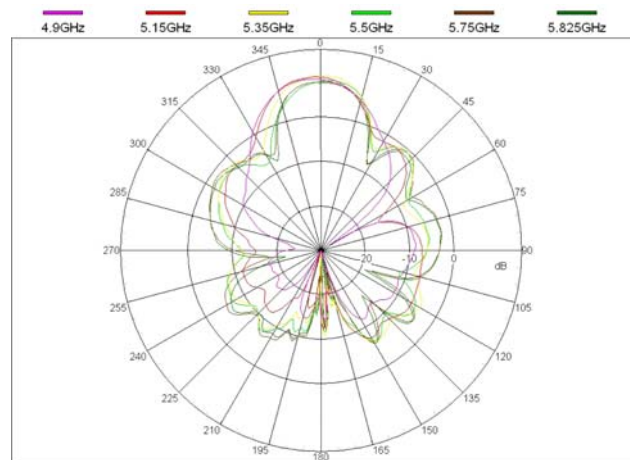
Internal Antenna (Dual Polarization)	Antenna Specification	
	Gain	8dBi
	Radiation	Directional
	Frequency Band Range	5.1-5.8GHz
	Horizontal -3dB Bandwidth	Azimuth : 92°, Elevation : 27°
	Vertical -3dB Bandwidth	Azimuth : 58°, Elevation : 23°

> Antenna Radiation Pattern

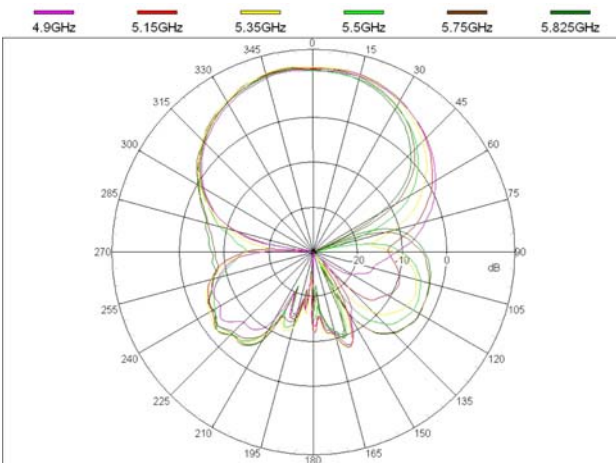
Horizontal Azimuth



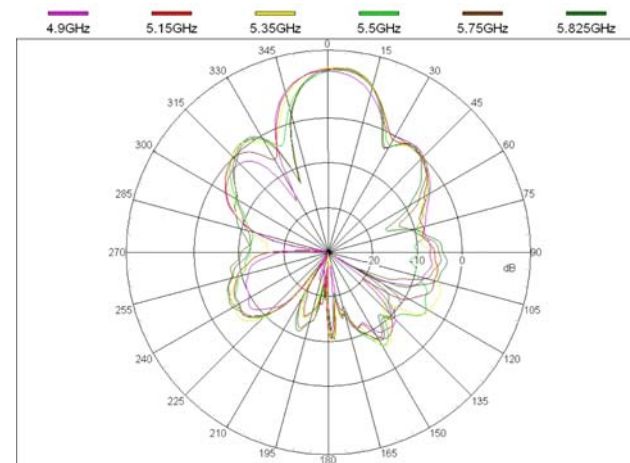
Horizontal Elevation



Vertical Azimuth



Vertical Elevation



External Antenna

1 x SMA connector

SOFTWARE FEATURES

> General	
Topology	Infrastructure
Protocol / Standard	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.11a(2.4GHz WLAN)
Operation Mode	802.11 a 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 : 54, 48, 36, 24, 18, 12, 11, 9, 6, 5.5, 2, 1 Mbps Long distance transmission : 1km to 30km Transmit power table Antenna Diversity with Dual Polarization Signal Strength indication using LEDs PPPoE(CR mode) and PPTP Narrow Bandwidth 5MHz/10MHz/20MHz Support PING function and Trace Route function MSSID Support VLAN Support Preferred SSID
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 MAC address filtering, up to 50 field 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)
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	270g

PACKAGE CONTENT
▶ 1 x EOC5510
▶ 1 x PoE Injector (EPE-1212)
▶ 1 x Power Adaptor
▶ 1 x CD with User's Manual
▶ 1 x QIG
▶ 1 x Metal strap
▶ 2 x Special screw set