ENH210

THE LEADER IN LONG RANGE BUSINESS CLASS WIRELESS DATA

Enterprise Outdoor Long-Range Wireless-N Client Bridge

The EnGenius ENH210 is a high-speed long-range outdoor 802.11n Wireless-to-Ethernet Client Bridge that operates on 2.4GHz band that is compliant with the IEEE802.11b/g/n standards and features a MIMO (Multiple In/Multiple Out) antenna design delivering a wireless data rate of up to 300Mbps.

The versatile, high-speed ENH210 can function as a Client Bridge, Client Router, or Wireless Distribution System (WDS) Bridge. Utilizing its integrated internal 14dBi antenna and its high power output of up to 800mW, the ENH210 delivers higher throughput across an extended range making it an ideal Point-to-point bridge for outdoor wireless connection.

ENH210 also features a robust security feature set that includes support for 64/128/256-bit WEP encryption, WPA/WPA2 Personal and Enterprise encryption, 802.1x authentication, hidden SSID and MAC address filtering. The multiple operation modes of the ENH210 make it an ideal solution for creating a high-speed, stable and highly secure outdoor wireless link between buildings, connecting surveillance cameras, or connecting outdoor digital sign to an office network.

Includes EnGenius Zone Controller Access Point Management software for configuring, managing and monitoring EnGenius-branded indoor and outdoor Access Points and Bridges. Zone Controller is a valuable tool for organizations that deploy multiple EnGenius long-range, versatile wireless networking products into complex networking environments. The software enables IT administrators to optimize network performance and eliminate downtime while significantly reducing the time and effort required to manage the network by providing administrators with the ability to create a facility map to depict real-time wireless coverage and allowing the monitoring and control of each asset, including the ability to push firmware upgrades.

Key Differentiators

ENTERPRISE-CLASS OUTDOOR HIGH-POWER CLIENT BRIDGE

- Compliant with IEEE802.11n standard with data rate up to 300Mbps
- Designed for outdoor deployments with IP67 rated housing, and surge protected Ethernet cable connector.
- Supports IEEE 802.3af/at PoE (Power-over-Ethernet) standards
- Supports MIB I, MIB II(RFC1213), Private MIB

HIGH 800mW TRANSMIT POWER

- For longer range performance than ordinary outdoor wireless bridges
- Ideal for long-range, high-speed Point-to-Point wireless deployments

INCLUDES ZONE CONTROLLER AP MANAGEMENT SOFTWARE

- Simplify deployment process
- Easy Network management

MULTIPLE MODES & SSIDS

- Wireless-to-Ethernet Client Bridge mode to connect to a Wireless Access Point or base station
- Transparent bridging between buildings with WDS mode
- Creates campus-wide wireless networks when used with an EnGenius ENH210EXT Outdoor Wireless Access Point

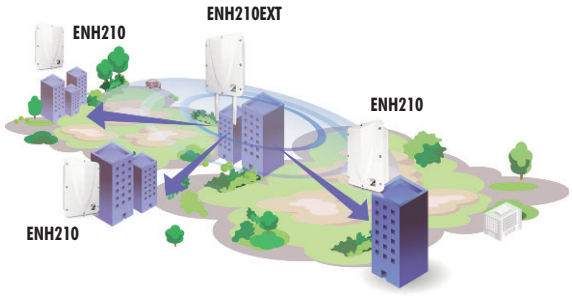
SUPPORT LATEST SECURITY STANDARDS

- WPA/WPA2 Personal (WPA-PSK using TKIP or AES)
- WPA/WPA2 Enterprise (WPA-EAP using TKIP) IEEE802.1x

USER FRIENDLY PACKAGING

- Quick installation guide
- PoE kit includes PoE injector and power adapter
- Mounting kit includes pole mount strap, wall-mount plate with screws

Ideal For:



POINT-TO-MULTIPOINT COMMUNICATION

OUTDOOR SECURITY CAMERA

EnGenius®

ENH210 – Technical Specifications

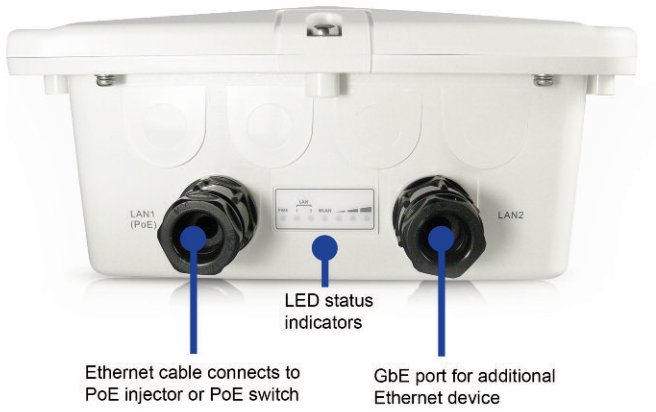
Specifications may change without notice.

HARDWARE SPECIFICATIONS

MCU	Atheros AR7242
RF	Atheros AR9283
Memory	64 MB
Flash	16 MB
Physical Interface	Gigabit Ethernet (10/100/1000) Power-over-Ethernet port x 1 Gigabit Ethernet (10/100/1000) port x 1
LED Indicators	Power Status LAN1 Gigabit Ethernet (10/100/1000Mbps) LAN2 Gigabit Ethernet (10/100/1000Mbps) WLAN (Wireless is enabled) 3 x Link Quality (Client Bridge mode)
Antenna	Built-in internal 14dBi directional antennas
Enclosure IP rating	IP-67
Power requirement	Active Ethernet (Power-over-Ethernet) IEEE 802.3af/at compliant Power Adapter 48V / 0.375A

RF SPECIFICATIONS

Wireless standard	IEEE802.11 b/g/n		
Frequency	2.412 ~ 2.472GH (b/g/n)		
Modulation Technology	IEEE 802.11b: DBQSK, DQPSK, CCK IEEE 802.11g: BQSK, QPSK, 16-QAM, 64-QAM IEEE 802.11n: BQSK, QPSK, 16-QAM, 64-QAM		
Operating Channels	11 channels		
Transmit Power	**802.11b(2.412 ~ 2.472GHz)** 29 dBm @ 1Mbps 29 dBm @ 2Mbps 29 dBm @ 5.5Mbps 29 dBm @ 11Mbps	**802.11g(2.412 ~ 2.472GHz)** 29 dBm @ 6Mbps 29 dBm @ 9Mbps 29 dBm @ 12Mbps 29 dBm @ 18Mbps 27 dBm @ 24Mbps 27 dBm @ 36Mbps 26 dBm @ 48Mbps 25 dBm @ 54Mbps	**802.11n(2.412 ~ 2.472GHz)** 29 dBm @ MCS0/MCS8 29 dBm @ MCS1/MCS9 29 dBm @ MCS2/MCS10 29 dBm @ MCS3/MCS11 29 dBm @ MCS4/MCS12 25 dBm @ MCS5/MCS13 24 dBm @ MCS6/MCS14 23 dBm @ MCS7/MCS15
Receiver Sensitivity	**802.11b(2.412 ~ 2.472GHz)** -97 dBm @ 1Mbps -95 dBm @ 2Mbps -92 dBm @ 5.5Mbps -89 dBm @ 11Mbps	**802.11g(2.412 ~ 2.472GHz)** -96 dBm @ 6Mbps -93 dBm @ 9Mbps -89 dBm @ 12Mbps -85 dBm @ 18Mbps -81 dBm @ 24Mbps -79 dBm @ 36Mbps -76 dBm @ 48Mbps -75 dBm @ 54Mbps	**802.11n(2.412~2.472 GHz)** -95 dBm @ MCS0/MCS8 -92 dBm @ MCS1/MCS9 -87 dBm @ MCS2/MCS10 -85 dBm @ MCS3/MCS11 -80 dBm @ MCS4/MCS12 -79 dBm @ MCS5/MCS13 -74 dBm @ MCS6/MCS14 -73 dBm @ MCS7/MCS15



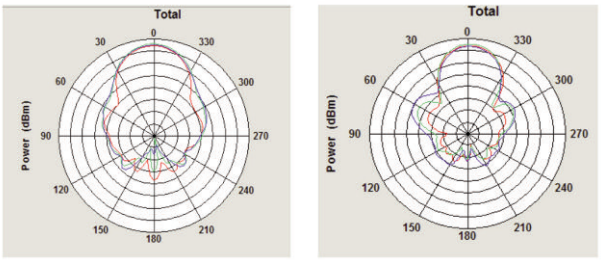
SOFTWARE SPECIFICATIONS

Topology	Infrastructure, ad hoc (WDS bridge)
Protocol	IEEE802.11 b/g/n (2.4GHz) 802.3, 802.3u, 802.3ab, 802.1D
Operation Mode	Client Bridge / Client Router / WDS / Access Point modes
LAN	DHCP server/client
VPN	VPN Pass-through
Networking	PPPoE, PPTP, DHCP client, spanning tree, Channel bandwidth
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 SSIDs in beacons MAC Address Filtering (when used as an Access Point)
Management	Interface: Web-based configuration Firmware upgrade via browser Administrator password changeable Reboot; Reboot to factory default System monitoring: Status in hand, statistics and event log Configuration backup, configuration retore Ping & Trace Route, Remote management: SNMP:v1, v2c; MIB I, MIB II(RFC1213), Private MIB Time setting: Manual; Auto: NTP
Certifications	FCC 15B, FCC 15C, IC, CSA

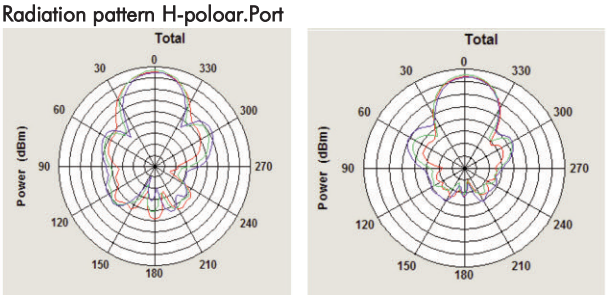
ENVIRONMENT & PHYSICAL

Temperature Range	Operation: -4°F ~ 158°F (-20°C ~ 70°C) Storage: -22°F ~176°F (-30°C ~ 80°C)
Humidity (non-condensing)	0% 90 % typical
Dimensions	12.2" (L) x 9.0" (W) x 4.21" (H)
Weight	2.5 lbs
Content of Package	ENH210 x 1 PoE Injector (EPE-48GR) Power Adaptor CD with User's Manual QIG Mounting Set Special screw set

Radiation pattern V-poloar.Port



Radiation pattern H-poloar.Port



EnGenius Technologies 1580 Scenic Avenue • Costa Mesa, CA 92626, USA • 888.735.7888