

ENH220EXT

802.11 b/g/n N300 Access Point



Key Features

- IEEE 802.11 b/g/n compliant
- Up to 300Mbps (2.4GHz)
- Complaint with IEEE 802.3 at for PoE supported
- PoE injector with reset from remote-end
- Two Gigabit Ethernet Port
- Waterproof Housing IP68 rated
- AP/CB/WDS Modes support
- Configure by web GUI or EZ controller
- SNMP V1/ V2c/V3, MIB I/II supported
- WEP/WPA/WPA2 wireless encryption
- Support IPV4/IPV6
- Seamless stream service (Fast Roaming)
- Manage and monitor by the AP, SSID

EnGenius Outdoor Base Station designs High Power, High Sensitivity and Strong Reliability Solutions under Harsh Environment.

ENH220EXT engineered with dual-band concurrent architecture which offers the bandwidth up to 300Mbps on 2.4GHz band. With the IP68-rated waterproof enclosure and the flexible mounting capability, the product is able to be applied under challenging environments.

Power Over Ethernet (PoE) and Reset from Remote-end Support

ENH220EXT equips with two gigabit Ethernet ports that support **IEEE 802.3at PoE input** and PoE injector with reset function. To fulfill the operation from distantly use, clients can reset the ENH220EXT to default value via EPE-48GR from remote-end.

ENH220EXT Data sheet Version 071114

**Theoretical wireless signal rate based on IEEE standard of 802.11 b, g, n chipset used. Actual throughput may vary. Network conditions and environmental factors lower actual throughput rate.*

*** All specifications are subject to change without notice*

BUSINESS CLASS

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Enterprise high-end Solutions

ENH220EXT can be configured by web configuration or EnGenius Zone Controller (EZ controller) software. With full-featured software built-in, the device allows administrator to control, manage, and optimize the network effectively from a central location which can decrease the maintenance cost greatly. ENH220EXT can operate into three different modes with **Access Point**, **Client Bridge** and **WDS Modes**. With powerful solution and individual interfaces, ENH220EXT can connect with the multiple devices and extend the wireless signal easily, as well as be the point to point connection between office buildings.

Effective Management

EnGenius has developed the advanced functions for maximum security, monitoring and easily management to ensure the optimal users' experience. To provide the reliable connection and stable performance on the transmission, ENH220EXT provides wide-range of authentication and encryption standards (including WEP, WPA, WPA2, TKIP/AES and IEEE 802.1X) to enforce the maximum security, as well as configure the band steering, fast roaming and clients status to enhance the quality of wireless service.



Gigabit Ethernet Port

1	LAN1 Port, IEEE 802.3at PoE Input
2	LAN2 Port

N-Type Connector

3	4	Detachable 5dBi 2.4GHz Omni-directional Antennas
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SPECIFICATIONS

Wireless Radio Specification

2.4GHz 802.11b/g/n	Max 300Mbps
Transmit Power (Maximum Value)	2.4GHz: Max 15dBm Maximum power is limited by regulatory power

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Supported Radio Technology	802.11b: Direct-sequence spread-spectrum (DSSS)
	802.11g/n: Orthogonal frequency-division multiplexing (OFDM)
	802.11n with 20/40 MHz channel width
Supported Modulation Types	802.11b/g with 20 MHz channel width
	802.11b: BPSK, QPSK, CCK
	802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM
Supported Data Rates (Mbps)	802.11b: 1, 2, 5.5, 11
	802.11g: 6, 9, 12, 18, 36, 48, 54
	802.11n: 6.5 to 300 (MCS0 to MCS15)
Power	
Power Source	802.3at compliant source
Power Consumption	TBD
Antennas	
Six detachable high gain antennas	Two detachable 5dBi 2.4GHz antennas
Omni-Directional Type	Provides the optimal coverage
Compliant with N type connector	
Interface	
Two 10/100/1000 BASE-T Ethernet Ports	One Port (LAN1) supports 802.3at PoE input
	One Port (LAN2) supports signal extension
	Reset button on the PoE injector (EPE-48GR)
Mechanical & Environment	
Dimensions/Weight	285mm (L) x 218mm (W) x 55.5mm (H)
	1890g (Unit, without mounting kit and antennas)
Operating	Temperature -20°C~70°C
	Humidity 0%~90% typical
Storage	Temperature -30°C~80°C
Surge / ESD Protection	ESD Protection: 8KV (Air); 4KV(Contact)
	Surge Protection: 4KV (Certificated standard is 1KV)
Harsh Environment Use	IP68 rated

Operation Mode

Access Point / Client Bridge / WDS A variety of operation modes to serve multiple constituencies and applications

Easy to Management

Auto Channel Selection Setting varies by regulatory domain

SSIDs BSSID support

8 SSIDs support

VLAN Pass-through VLAN pass through over WDS bridge mode

SNMP & MIB v1/v2c/v3 support

MIB I/II, Private MIB

Save Configuration as Default Saves the users' configuration as default value

Clients Traffic Status Reports the various main information timely which is required by administrator

Guest Network Allows users to manage easily grant "visitor" access within the network

E-mail alert Provides a network monitoring tool for administrators to stay informed the configuration change

QoS Complaint with IEEE 802.11e standard

RADIUS Accounting Assist operators to offload 3G to the Wi-Fi seamlessly

Effective Control and Use

CLI Comments Support Setting varies by Regulatory Domains

Distance Control (Ack Timeout)

Multicast Supported

Wi-Fi Scheduler Set the schedule for rebooting the device

Fast Roaming Minimize perceptible delay during re-association

Fast Handover Steer clients from the AP to other APs under the same encryption and SSID when the signal is above the default value

Reinforcement Security

WEP Encryption-64/128/152 bit

WPA/WPA2 Enterprise (WPA-EAP using TKIP or AES)

Hide SSID in beacons	
MAC address filtering	Filter up to 32 MACs per SSID
Wireless STA (Client) connection list	Reports the various main information timely which is required by administrator
Https	Widely used communications approach for securing communication over a computer network
SSH	Provide confidentiality and integrity of data over an unsecured network, such as the Internet

RF Specification (Aggregated Value)			
Channel	Data Rate	Transmit Power (Aggregated, dBm)	Received Sensitivity (Aggregated, dBm)
802.11b 2.4 GHz	1 Mbps	15.0	-96.0
	2 Mbps	15.0	-95.0
	5.5 Mbps	15.0	-93.0
	11 Mbps	15.0	-92.0
802.11g 2.4 GHz	6 Mbps	15.0	-94.0
	54 Mbps	14.0	-75.0
802.11n HT20 2.4 GHz	MCS 0 / 8	15.0	-95.0
	MCS 7 / 15	15.0	-70.0
802.11n HT40 2.4 GHz	MCS 0 / 8	15.0	-94.0
	MCS 7 / 15	14.0	-69.0

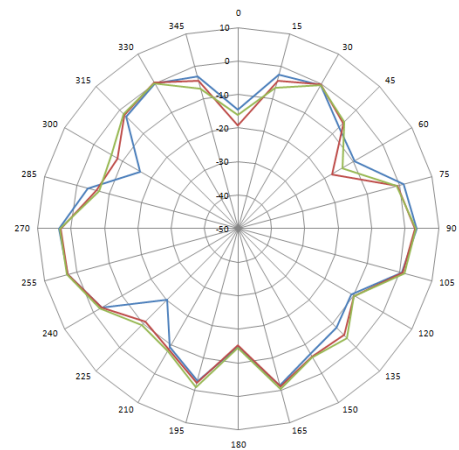
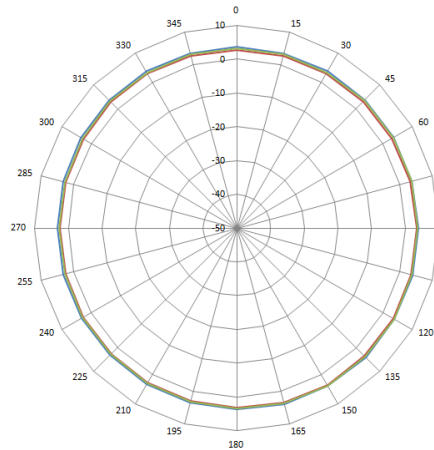
*Maximum performance of the hardware provided. Maximum transmit power is limited by local regulatory.

*The supported frequency band is restricted by local regulatory requirements.

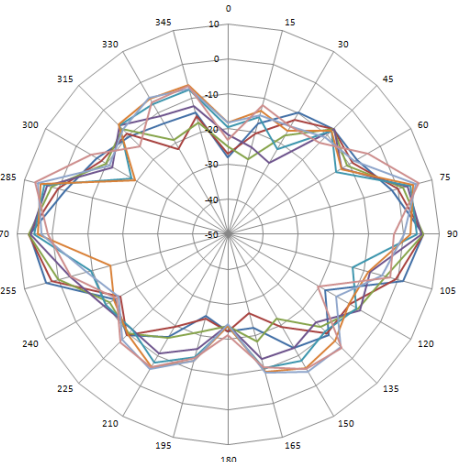
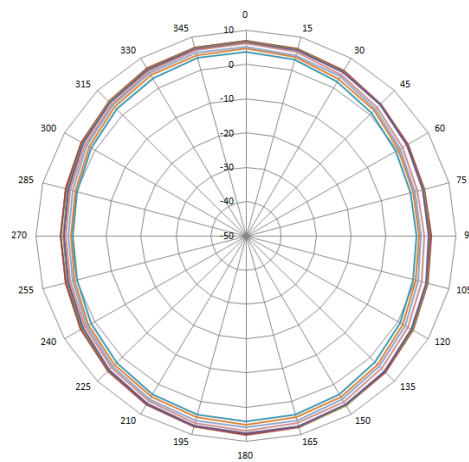
*Transmit power is configured in 1.0dBm increments.

Antenna Specifications (External Antenna)	
External Antenna	2.4GHz
Average Antenna Gain	5.0dBi
Polarization	Linear
Azimuth Beam-Width	360°
Elevation Beam-Width	28°

VSWR	1:2.0	
Dimension	22.8(Φ)x187(L) mm	
Diagram Pattern	2.4GHz-H Plane	2.4GHz-E Plane



5GHz-H Plane	5GHz-E Plane
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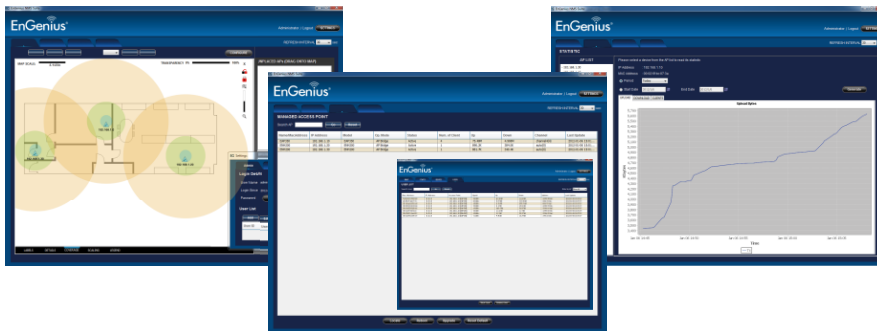
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EZ CONTROLLER

Network Management System - EnGenius Zone Controller

In enhancing the real-time functionality of a network, applying the best network management software tool is necessary. Built-in Network Management System, EZ Controller (EnGenius Zone Controller), provides an intelligent tool for IT manager, installer, and network administrators to configure control, and manage all wireless devices within network from one central location. This application ensures the entire network will optimally operate without troubles, glitches and interruptions.

The growing demand of performance related results from service providers or someone involved in an enterprise, you need to provide a huge platform to make it successful. The robust design of EZ Controller can manage different devices simultaneously and precisely, as well as configure the advanced service for wireless clients.



Configure, control and manage EnGenius Enterprise Wireless Devices from one central location.

Features:

- Easy-to-use User Interface
- Optimize network performance
- Eliminate downtime
- Check real-time wireless coverage
- Monitor and control each sheet
- Monitor traffic loads by AP, MAC or IP address
- Sequential firmware upgrades to deployed APs / Bridges
- Import and archive floorplan maps for radio coverage plotting
- Labels assets by MAC and IP address or user-defined aliases
- Export real-time AP statistics report

An intelligent solution for different business environment



Villa



Campus



Office



Plaza