

THE LEADER IN LONG RANGE WIRELESS

EnGenius® EAP600

High-Powered, Dual-Band Indoor
Wireless-N Access Point
with Gigabit



CONCURRENT DUAL-BAND 300+300MBPS SUPPORT

802.11N dual radio concurrent operation in 2.4GHz and 5GHz for maximum wireless throughput performance

MSSID AND VLAN SUPPORT

Up to 8 BSSIDs per radio with 802.1q VLAN tagging

4X INTERNAL ANTENNAS

4x 5dBi Internal antennas optimizing maximum RF performance

AESTHETIC DESIGN ENCLOSURE

"Smoke Detector" appearance and easy mounting mechanism with T-rail, ceiling, and wall mount kits

HIGH-POWER, LONG-RANGE WI-FI

29 dBm for 2.4GHz, 26 dBm for 5GHz RF Tx power provides more than twice the Wi-Fi coverage over mainstream competitors

802.3af/at PoE COMPATIBLE

Supports Power over Ethernet (IEEE 802.3af/at) and allows deployment in areas where power outlets are not available

SIMPLIFIED WIRELESS NETWORK MANAGEMENT

Includes SNMP-based wireless access point management software EZ Controller

The **X-treme SMB EnGenius EAP600** is a concurrent dual-band 2.4+5GHz Wireless-N Indoor Access Point that features high transmit RF power (29 dBm on 2.4GHz and 26 dBm on 5GHz) for long range connectivity. With wireless speeds up to 300Mbps on each radio and a Gigabit port for connecting to a switch or router it's ideal for expanding a network with additional bandwidth to support additional users.

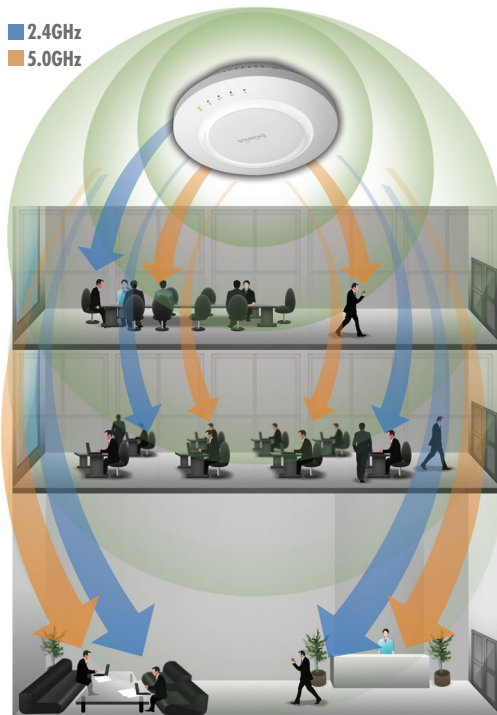
With the dual-band Wireless-N EAP600 companies can now offer employees, guests, staff or students more expanded options for users who transfer large files within the network or use other bandwidth intensive applications like streaming HD video. The AP's Gigabit Ethernet (10/100/1000) port also offers greater bandwidth capacity and faster data transfers through the network. This high-powered Access Point/WDS Bridge with its enhanced receive sensitivity and internal MIMO (Multiple In/ Multiple Out) antenna array extends wireless coverage and enhances connectivity to client devices even in areas where connections have been previously challenging or non-existent and in some buildings it's wireless signal can penetrate up to 3 floors. This makes the EAP600 ideal for extending networks within large or multi-story buildings or expansive, client-intensive facilities like hotels, resorts, hospitals, office buildings, universities or other multi-building campus facilities.



reddot design award
winner 2012

The **2012 reddot design award-winning EAP600** has been designed to appear as a low-profile smoke detector and thus unobtrusively blend in with other common building infrastructure appliances. Because the EAP600 is designed for deployments on ceilings where power outlets may be scarce, it is also PoE (Power- over-Ethernet) IEEE 802.3af/at capable when used with a PoE injector or PoE switch.

The EAP600 can be configured to operate in several different modes – as a dual-band Wireless-N Access Point, a WDS Access Point, or Repeater. It operates concurrently in the 2.4GHz and 5GHz frequency spectrums supporting 802.11a/b/g/n standards.



Long-range High-powered RF provides excellent Wi-Fi penetration

EnGenius® Get a Connected, Get Connected					
	EAP9550 Wireless-N AP	EAP150 High-powered Wireless-N AP	EAP300 High-powered Wireless-N AP	EAP350 High-powered Wireless-N AP	EAP600 Concurrent Dual-band High-powered Wireless-N AP
Frequency Band	2.4GHz	2.4GHz	2.4GHz	2.4GHz	2.4GHz & 5GHz
Maximum Data Speed Rate	Up to 300Mbps	Up to 150Mbps	Up to 150Mbps	Up to 300Mbps	300+300Mbps
LAN Interface	10/100	10/100	10/100	10/100/1000	10/100/1000
RF Transmit Power (in dBm)	20dBm	26dBm	29dBm	29dBm	2.4GHz: 29dBm 5GHz: 26dBm
Antenna	2x 4dBi Omni Embedded	2x 5dBi Omni Embedded	2x 5dBi Omni Embedded	2x 5dBi Omni Embedded	4x 5dBi Omni Embedded
Users Support	Up to 32	Up to 32	Up to 32	Up to 50	Up to 50 on each radio
Access Point	•	•	•	•	•
WDS AP	•	•	•	•	•
Universal Repeater	•	•	•	•	•
Client Isolation	•	•	•	•	•
VPN Pass-through	•	•	•	•	•
MAC Address Filtering	•	•	•	•	•
802.1x Radius Support	•	•	•	•	•
SSID to VLAN Mapping	•	•	•	•	•
BSSIDs	4	4	4	4	8 in each radio
QoS (WMM)	•	•	•	•	•
SNMP	v1, v2c	v1, v2c	v1, v2c	v1, v2c	v1, v2c, v3
Wireless Traffic Shaping	•	•	•	•	•
AP Management Software (EZ)	•	•	•	•	•
Power over Ethernet (PoE) Compatible	802.3af	802.3af	802.3af	802.3af	802.3af/at

EAP600 - Technical Specifications

HARDWARE SPECIFICATIONS

MCU/RF	AR9344 + AR9382
Memory	64 MB
Flash	8 MB
Physical Interface	LAN: 1 x 10/100/1000 Gigabit Ethernet (RJ-45) port Reset Button Power Jack
Power requirements	Power Supply: 90 to 240 VDC \pm 10%, 50/60 Hz (Depends on different countries) Active Ethernet (Power over Ethernet, IEEE 802.3af/at) 48 VDC/0.375A Device: 12V/2A

RF SPECIFICATIONS

Wireless Standard	IEEE 802.11 a/b/g/n																																										
Frequency Band	Radio I: 802.11 b/g/n 2.412 ~ 2.484(GHz) Radio II: 802.11 a/n 5.18~5.24(GHz), 5.26~5.32(GHz), 5.5~5.7(GHz), 5.745~5.825(GHz)																																										
Modulation Technologies	OFDM: BPSK, QPSK, 16-QAM, 64-QAM, DBPSK, DQPSK, CCK																																										
Operating Channels	2.4GHz: US/Canada 1-11 2.4GHz: Europe 1-13 2.4GHz: Japan 1-14 5GHz: Country dependent for the following ranges: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 149, 153, 157, 161, 165																																										
Transmit Power	<table><tr><td>802.11b</td><td>802.11n (2.4GHz)</td></tr><tr><td>29 dBm @ 1Mbps</td><td>29 dBm @ MCS0/MCS8</td></tr><tr><td>29 dBm @ 2Mbps</td><td>29 dBm @ MCS0/MCS9</td></tr><tr><td>29 dBm @ 5.5Mbps</td><td>28 dBm @ MCS0/MCS10</td></tr><tr><td>29 dBm @ 11Mbps</td><td>28 dBm @ MCS0/MCS11</td></tr><tr><td></td><td>24 dBm @ MCS0/MCS12</td></tr><tr><td>802.11g</td><td>24 dBm @ MCS0/MCS13</td></tr><tr><td>29 dBm @ 6Mbps</td><td>23 dBm @ MCS0/MCS14</td></tr><tr><td>29 dBm @ 9Mbps</td><td>23 dBm @ MCS0/MCS15</td></tr><tr><td>28 dBm @ 12Mbps</td><td></td></tr><tr><td>28 dBm @ 18Mbps</td><td></td></tr><tr><td>24 dBm @ 24Mbps</td><td>802.11n (5GHz)</td></tr><tr><td>24 dBm @ 36Mbps</td><td>26 dBm @ MCS0/MCS8</td></tr><tr><td>23 dBm @ 48Mbps</td><td>26 dBm @ MCS0/MCS9</td></tr><tr><td>23 dBm @ 54Mbps</td><td>25 dBm @ MCS0/MCS10</td></tr><tr><td></td><td>25 dBm @ MCS0/MCS11</td></tr><tr><td>802.11a</td><td>24 dBm @ MCS0/MCS12</td></tr><tr><td>26 dBm @ 6Mbps ~ 9Mbps</td><td>24 dBm @ MCS0/MCS13</td></tr><tr><td>25 dBm @ 6Mbps ~ 9Mbps</td><td>23 dBm @ MCS0/MCS14</td></tr><tr><td>24 dBm @ 24Mbps ~ 36Mbps</td><td>23 dBm @ MCS0/MCS15</td></tr><tr><td>23 dBm @ 48Mbps ~ 54Mbps</td><td></td></tr></table>	802.11b	802.11n (2.4GHz)	29 dBm @ 1Mbps	29 dBm @ MCS0/MCS8	29 dBm @ 2Mbps	29 dBm @ MCS0/MCS9	29 dBm @ 5.5Mbps	28 dBm @ MCS0/MCS10	29 dBm @ 11Mbps	28 dBm @ MCS0/MCS11		24 dBm @ MCS0/MCS12	802.11g	24 dBm @ MCS0/MCS13	29 dBm @ 6Mbps	23 dBm @ MCS0/MCS14	29 dBm @ 9Mbps	23 dBm @ MCS0/MCS15	28 dBm @ 12Mbps		28 dBm @ 18Mbps		24 dBm @ 24Mbps	802.11n (5GHz)	24 dBm @ 36Mbps	26 dBm @ MCS0/MCS8	23 dBm @ 48Mbps	26 dBm @ MCS0/MCS9	23 dBm @ 54Mbps	25 dBm @ MCS0/MCS10		25 dBm @ MCS0/MCS11	802.11a	24 dBm @ MCS0/MCS12	26 dBm @ 6Mbps ~ 9Mbps	24 dBm @ MCS0/MCS13	25 dBm @ 6Mbps ~ 9Mbps	23 dBm @ MCS0/MCS14	24 dBm @ 24Mbps ~ 36Mbps	23 dBm @ MCS0/MCS15	23 dBm @ 48Mbps ~ 54Mbps	
802.11b	802.11n (2.4GHz)																																										
29 dBm @ 1Mbps	29 dBm @ MCS0/MCS8																																										
29 dBm @ 2Mbps	29 dBm @ MCS0/MCS9																																										
29 dBm @ 5.5Mbps	28 dBm @ MCS0/MCS10																																										
29 dBm @ 11Mbps	28 dBm @ MCS0/MCS11																																										
	24 dBm @ MCS0/MCS12																																										
802.11g	24 dBm @ MCS0/MCS13																																										
29 dBm @ 6Mbps	23 dBm @ MCS0/MCS14																																										
29 dBm @ 9Mbps	23 dBm @ MCS0/MCS15																																										
28 dBm @ 12Mbps																																											
28 dBm @ 18Mbps																																											
24 dBm @ 24Mbps	802.11n (5GHz)																																										
24 dBm @ 36Mbps	26 dBm @ MCS0/MCS8																																										
23 dBm @ 48Mbps	26 dBm @ MCS0/MCS9																																										
23 dBm @ 54Mbps	25 dBm @ MCS0/MCS10																																										
	25 dBm @ MCS0/MCS11																																										
802.11a	24 dBm @ MCS0/MCS12																																										
26 dBm @ 6Mbps ~ 9Mbps	24 dBm @ MCS0/MCS13																																										
25 dBm @ 6Mbps ~ 9Mbps	23 dBm @ MCS0/MCS14																																										
24 dBm @ 24Mbps ~ 36Mbps	23 dBm @ MCS0/MCS15																																										
23 dBm @ 48Mbps ~ 54Mbps																																											
Receiver Sensitivity	<table><tr><td>802.11b \leq -98 dBm @ 1Mbps \leq -93 dBm @ 11Mbps</td><td>802.11n \leq -97 dBm @ MCS0 (2.4GHz) \leq -78 dBm @ MCS7 \leq -96 dBm @ MCS8 \leq -82 dBm @ 54Mbps \leq -76 dBm @ MCS15</td></tr><tr><td>802.11g \leq -96 dBm @ 6Mbps \leq -82 dBm @ 54Mbps</td><td></td></tr><tr><td>802.11a \leq -90 dBm @ 6Mbps \leq -72 dBm @ 54Mbps</td><td>802.11n \leq -89 dBm @ MCS0 (5GHz) \leq -70 dBm @ MCS7 \leq -89 dBm @ MCS8 \leq -70 dBm @ MCS15</td></tr></table>	802.11b \leq -98 dBm @ 1Mbps \leq -93 dBm @ 11Mbps	802.11n \leq -97 dBm @ MCS0 (2.4GHz) \leq -78 dBm @ MCS7 \leq -96 dBm @ MCS8 \leq -82 dBm @ 54Mbps \leq -76 dBm @ MCS15	802.11g \leq -96 dBm @ 6Mbps \leq -82 dBm @ 54Mbps		802.11a \leq -90 dBm @ 6Mbps \leq -72 dBm @ 54Mbps	802.11n \leq -89 dBm @ MCS0 (5GHz) \leq -70 dBm @ MCS7 \leq -89 dBm @ MCS8 \leq -70 dBm @ MCS15																																				
802.11b \leq -98 dBm @ 1Mbps \leq -93 dBm @ 11Mbps	802.11n \leq -97 dBm @ MCS0 (2.4GHz) \leq -78 dBm @ MCS7 \leq -96 dBm @ MCS8 \leq -82 dBm @ 54Mbps \leq -76 dBm @ MCS15																																										
802.11g \leq -96 dBm @ 6Mbps \leq -82 dBm @ 54Mbps																																											
802.11a \leq -90 dBm @ 6Mbps \leq -72 dBm @ 54Mbps	802.11n \leq -89 dBm @ MCS0 (5GHz) \leq -70 dBm @ MCS7 \leq -89 dBm @ MCS8 \leq -70 dBm @ MCS15																																										
Antenna	4x internal 5dBi antennas (Diversity support)																																										

SOFTWARE SPECIFICATIONS

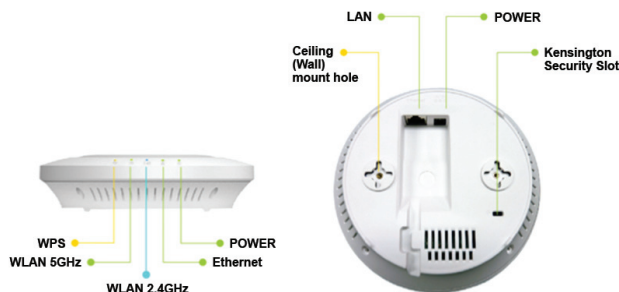
Topology	Infrastructure/Ad-Hoc
Operation Mode	Access Point/WDS Bridge/WDS AP/Universal Repeater
Multiple BSSID	Supports up to 8 BSSIDs per radio
LAN	IP (check validity and DHCP server IP range)MAC
VLANs	Supports 802.1q SSID to VLAN mapping
Spanning Tree	Supports 802.1d Spanning Tree Protocol
Wireless	Wireless mode: 11a/11b/11g/11n Channel selection (setting varies by country) Channel bandwidth (Auto, 20MHz, 40MHz) Transmission rate: 2.4GHz: 11n only, 11b/g/n mix, 11b only, 11b/g, 11g only 5GHz: 11n only, 11a/n mix, 11a only
VPN	VPN pass-through (PPTP, L2TP, IPSEC)
QoS	WMM
WPS	Software only
Security	WEP Encryption - 64/128 bit WPA Personal (WPA-PSK using TKIP or AES) WPA Enterprise (WPA-EAP using TKIP) 802.1x Authenticator: MDS/TLS/TLS, PEAP SSID broadcast enable/disable WLAN MAC Address Filter WLAN L2 isolation (AP mode) Wireless STA (Client) connected list (Idle/Connection Time, Pkt statistics)

MANAGEMENT

Tx Power Control	Adjust transmit power by dBm
Configuration	Web-based configuration (HTTP)/Telnet
Telnet Server	CLI
Firmware Upgrade	Upgrade firmware via web browser
Administrator Setting	Administrator Username & Password change
Reset Setting	Reboot (press 1 second). Reset to Factory Default (press 10 second)
System Monitoring	Status Statistic and Event log
SNMP	V1, V2c, V3
MIB	MIB I, MIB II (RFC1213) and Private MIB
Traffic Shaping	Incoming and outgoing wireless traffic shaping
Auto-channel Selection	Automatically selecting least congested channel
Bandwidth Measurement	IP range and bandwidth management
Auto Reboot	Reboot AP by min, hour, day, week
Backup & Restore	Save & restore settings through Web interface
CLI	Support Command Line Interface
Diagnosis	IP pinging statistics
Log	SysLog and Local Log support
LED Control	On/Off
AP Detection	Scanning for available EnGenius APs

ENVIRONMENT & PHYSICAL

Temperature Range	Operating: 0 to 50° C (32° to 122° F) Storage: -20 to 60° C (-4° to 140° F)
Humidity (non-condensing)	Operating: 90% or less Storage: 90% or less
Dimensions:	Diameter: 6.36" (161.5mm) Height: 1.64" (41.5mm)
Weight	0.62 lb. (280g)
Certifications	FCC, IC



EAP600 - Datasheet 10/01/2012 Rev01