



EnSky Series Indoor Access Points With EnTurbo

EnSky Series with EnTurbo Next-Gen 11ac Wave 2 Indoor Access Points

EnTurbo Indoor Access Points turbocharge wireless speed, coverage, and reliability. EnTurbo makes powerful, next generation Wave 2, business-class Wi-Fi affordably accessible for small to mid-size businesses and large residences.

Turbocharged Performance

EnTurbo's powerful onboard Qualcomm® 717 MHz quad-core processors turbocharge wireless performance and efficiency with up to 30 percent faster throughput compared to 802.11ac Wave 1 3x3 access points. Combined with new 802.11ac technology, EnTurbo APs maximize speed and performance, support greater user device capacity and enhanced connection reliability.

Features & Benefits

- Quad-Core CPU, 717 MHz Turbo Engine
- 11ac Wave 2 Wireless Speeds to 867 Mbps (5 GHz); to 400 Mbps (2.4 GHz) (EAP1300/EAP1300EX/EAP1250)
- Up to 30% Faster Throughput Over 11ac Wave 1 3x3 Aps
- Ceiling-Mount, Integrated or Detachable High-Gain Antennas
- Compact, Sleek, Stylish Design (EAP1250)
- MU-MIMO Improves Performance & Device Capacities
- Beamforming Technology Optimizes Signal, Reception & Reliability for Clients
- 802.3af PoE for Easy Placement Where Outlets are Scarce
- Suite of Advanced AP Management & Security Features
- Flexible Operation Modes: AP, WDS & Repeater
- Simple Web-Based AP Monitoring & Management Software
- Stand-Alone or Manage APs via EnGenius Switches or ezMaster™ Software
- Mesh Wireless Support Simplifies Setup, Optimizes Signals & Automatic Self-Heals



Next Generation Wireless Technology

Replace your old wireless with new, advanced 11ac Wave 2 technology to support today's content-rich mobile world.



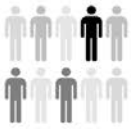
Maximized Speed & Performance

The feature-rich EnTurbo models leverages the advanced 11ac Wave 2 Wi-Fi technology that maximizes wireless speed and performance while eliminating network lag.



Improved Signal Reliability

Beamforming Antenna technology directs and adjusts signal beams as staff or customers move throughout the area, ensuring optimal signal and reception reliability.



Increased User Capacities

Multi-User (MU) MIMO sends dedicated wireless streams to multiple user devices at the same time, improving your network's efficiency.



Future-Proof Network

Upgrade from slower, older technology while supporting the future needs of IoT and mobile technology. Ensure your network against further upgrades for the next five years.

Indoor Form & Function

Clean lines and low profile housing ensure the EnTurbo Indoor AP's ceiling-mount design (EAP1300 & EAP2200) blends seamlessly into most deployment environments.

Maneuver EAP1300EXT's four detachable antennas to ensure optimal signal alignment, increasing the effectiveness of your network deployment. Remove the antennas and replace them with higher gain antennas to further amplify your wireless range. EAP1250 boasts a clean white, minimalistic design that stylishly blends into any business or residential environment. Its small, round footprint and extremely low profile makes the EAP1250 easy to discretely place where needed.

Optimize Connectivity With Wireless Mesh

Utilize mesh access point mode for retrofit or new install applications where wire runs are not possible. Mesh's smart sensing technology adds devices quickly, optimizes routes between APs, and automatically self-heals the network in the event an AP should ever lose connection.

Far-Reaching Wireless Blankets Coverage

Wide reaching, detachable 360-degree antennas minimize interference for blanketed coverage through floors, ceilings and walls to provide far-reaching reliable connectivity.

Reliable Connectivity & Network Protection

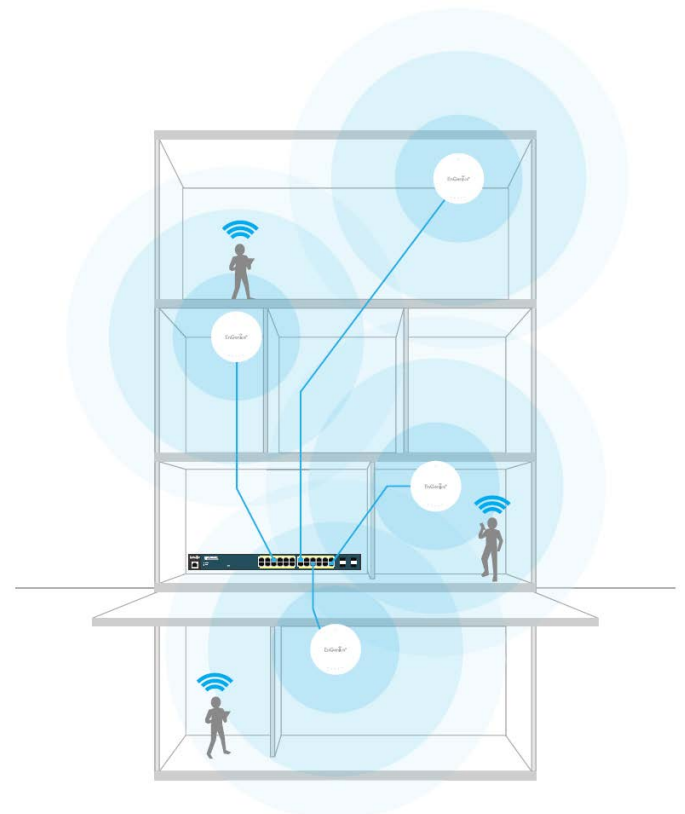
Configure multiple APs to ensure seamless and reliable connectivity, when they move around the network, with standard-based roaming. Quickly detect and avoid network threats through a suite of advanced security features including Guest Networks and email alerts.

Automatic Band Selection

Efficiently steer dual-band client devices to the optimal, less congested frequency band. While the Tri-band AP also routes dedicated 2.4 and 5 GHz devices directly to the respective bands ensuring the fastest bandwidth for all devices.

Flexible Power Options

Connect and power the EnTurbo Indoor APs via their Gigabit 802.3af Power-over-Ethernet ports for discrete placement in locations where power outlets are limited or unavailable, such as ceilings, hallways, rafters and attics. Place the APs up to 328 feet from a PoE-compliant switch or PoE adapter.



ezMaster

Network Management Software

Flexible Distributed Network Management

ezMaster Network Management Software expands the flexibility and scalability of EnSky Series Managed Access Points and Switches.

ezMaster allows organizations, such as branch offices and managed service providers, to easily and affordably deploy, monitor and manage a large number of Ensky APs, Switches and IP Cameras across geographically diverse properties. Centrally manage an unlimited number of independent distributed networks in the same subnet or cross-subnets from a single, at-a-glance network dashboard, no matter where they're located.

Deploy ezMaster locally, remotely or via a Cloud-based service with or without an onsite controller.

Powerful, Scalable Options

ezMaster scales with your growing business needs. Manage 10000+ EnSky devices and 10000+ concurrent users. Together, EnSky APs, Switches and ezMaster provide a flexible, fully integrated solution with redundancy support and future expandability for broader device connectivity.



System Requirements

Recommended environment for managing up to 500 APs

CPU: Intel® Core™ i7 quad-core or above
RAM: 4 GB minimum
HDD: 500 GB (actual requirement dependent on log size)
OS: Microsoft® Windows® 7 or later + VMware® Player 7.0 or compatible virtualization software

Recommended environment for managing 1000+ APs

CPU: Intel® Xeon® Processor E3 or above
RAM: 4 GB minimum
HDD: 500 GB (actual requirement dependent on log size)
OS: Microsoft® Windows® 7 or later + VMware® Player 7.0 or compatible virtualization software

Browser Requirements

Internet Explorer 10 or better
Firefox 34.0 or better
Chrome 31.0 or better
Safari 8.0 or better

Network Topology Requirements

At sites where APs are deployed: A DHCP-enabled network for APs to obtain an IP address

Simplified Device Management

ezMaster Network Management Software makes centralized device management easy. How? Through bulk configuration, provisioning and monitoring, a comprehensive at-a-glance network dashboard, rich analytics and reporting, and much more.

ezMaster Software features

- **Centralized Management**
 - Configure, Managed & Monitor 1000+ EnSky Devices
 - Cross-Network AP Management
 - AP Group Configuration
- **Access Point Configuration & Management**
 - Auto Channel Selection
 - Auto Tx Power
 - Background Scanning
 - Band Steering (Auto Band Steering & Band Balancing)
 - Client Isolation
 - Client Limiting
 - Fast Roaming
 - L2 Isolation
 - LED On/Off Control
 - Multiple SSID
 - RSSI Threshold
 - Secure Guest Network
 - Traffic Shaping
 - VLAN Isolation
 - VLAN Tag
- **Comprehensive Monitoring**
 - Device Status Monitoring
 - Floor Plan View
 - Map View
 - Rogue AP Detection
 - System Status Monitoring
 - Visual Topology View
 - Wireless Client Monitoring
 - Wireless Coverage View
 - Wireless Traffic & Usage Statistics
- **Management & Maintenance**
 - Bulk Firmware Upgrade
 - Traffic Shaping
 - Captive Portal
 - Email Alert
 - Kick/Ban Clients
 - One-Click Update
 - Remote Logging
 - Scheduling
 - Seamless Migration
 - Syslog

EnSky Series Indoor Access Points



Models	EAP1300	EAP1300EXT	EAP1250
Standards	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2	802.11a/b/g/n/ac Wave 2
Frequency	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz	2.4 GHz & 5 GHz
2.4 GHz Max. Data Rate	400 Mbps	400 Mbps	400 Mbps
5 GHz Max. Data Rate	867 Mbps	867 Mbps	867 Mbps
Radio Chains/Streams	2 x 2:2	2 x 2:2	2 x 2:2
RF Output Power (2.4 GHz)	23 dBm	23 dBm	23 dBm
RF Output Power (5 GHz)	23 dBm	23 dBm	23 dBm
Ethernet Ports	1 x Gigabit PoE	1 x Gigabit PoE	1 x Gigabit PoE
Power-over-Ethernet	802.3af	802.3af	802.3af
Power Consumption (Peak)	12W	12W	9W
Integrated Antenna	2 x 5 dBi (2.4 GHz) 2 x 5 dBi (5 GHz)	N/A	2 x 5 dBi (2.4 GHz) 2 x 5 dBi (5 GHz)
External Antenna	N/A	4 x 5 dBi Omni-Directional Detachable SMA-Type	N/A

Technical Specifications

Standards

IEEE 802.11b/g/n on 2.4 GHz IEEE802.11a/n/ac on 5 GHz

Processor

Qualcomm® 717 MHz Quad-Core CPU 4x ARM Cortex S

Antennas

EAP1250 / EAP1300

4 x 5 dBi Omni-Directional Integrated

EAP1300EXT

4 x 5 dBi Omni-Directional Detachable (SMA-Type)

Physical Interface

10/100/1000 Gigabit Ethernet Port

DC Jack

Reset Button

Kensington Security Slot

LED Indicators

EAP1300/EAP1300EXT

Power/LAN/2.4 GHz/5 GHz

EAP1250

Power (Green)/Ready to Config (Yellow)/Internet Connectio (Blue)/Internet Disconnection (Red)

Power Source

Power-over-Ethernet: 802.3af Input

IEEE 802.11e Compliant Source

12VDC/1A Power Adapter

Maximum Power Consumption

EAP1300/EAP1300EXT 12W

EAP1250 9W

Surge Protection

0.5KV

Wireless & Radio Specifications Operating Frequency

Dual-Radio Concurrent 2.4 GHz & 5 GHz

Operation Modes

EAP1300/EAP1300EXT

Access Point Mode (AP mode)

WDS: WDS AP, WDS Bridge

EAP1250

Access Point Mode (AP mode)

WDS: WDS AP, WDS Bridge

Access Point

Frequency Radio

2.4 GHz: 2400 MHz~2472 MHz

5 GHz: 5150 MHz~5250 MHz, 5250 MHz~5350 MHz, 5470 MHz~5725 MHz, 5725 MHz~5850 MHz

Transmit Power

2.4 GHz: 23 dBm

5 GHz: 23 dBm

Tx Beamforming (TxBF)

Radio Chains/Spatial Streams

2x2:2

SU-MIMO

2.4 GHz - Two (2) Spatial Stream SU-MIMO up to 400 Mbps to individual 2x2 VHT40 client devices (300 Mbps for HT40 802.11n client devices)

5 GHz - Two (2) Spatial Stream SU-MIMO up to 867 Mbps to individual 2x2 VHT40 client devices

MU-MIMO

Two (2) Spatial Streams MU-MIMO up to 867 Mbps to two (2) MU-MIMO capable wireless devices simultaneously

Supported Data Rates (Mbps):

2.4 GHz: Max 400

5 GHz: Max 867

802.11b: 1, 2, 5.5, 11

802.11a/g: 6, 9, 12, 18, 36, 48, 54

802.11n: 6.5 to 400 Mbps (MCS0 to MCS15)

802.11ac: 6.5 to 867 Mbps (MCS0 to MCS9, NSS = 1 to 2)

Supported Radio Technologies

802.11b: Direct-Sequence Spread Spectrum (DSSS)

802.11a/g/n/ac: Orthogonal Frequency-Division Multiplexing (OFDM)

802.11n/ac: 2x2 MIMO with 2 Streams

Channelization

802.11ac Supports Very High Throughput (VHT) VHT 20/40/80 MHz

802.11n Supports High Throughput (HT)—HT 20/40 MHz

802.11n Supports Very High Throughput (VHT) Under the 2.4 GHz Radio—VHT 40 MHz (256-QAM)

802.11n/ac Packet Aggregation: AMPDU, ASPDU

Supported Modulation

802.11b: BPSK, QPSK, CCK

802.11a/g/n: BPSK, QPSK, 16-QAM, 64-QAM

802.11ac: BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM

Management

Multiple BSSID

Supports 16 SSIDs (8 SSIDs per Band)

VLAN Tagging

Supports 802.1q SSID-to-VLAN Tagging

Cross-Band VLAN Pass-Through

Management VLAN

Spanning Tree

Supports 802.1d Spanning Tree Protocol

QoS (Quality of Service)

Compliant With IEEE 802.11e Standard

WMM

SNMP

v1, v2c, v3

MIB

I/II, Private MIB

Management Features

Deployment Options

Stand-Alone (Individually Managed)

Managed Mode (w/ezMaster & Neutron Switch)

Stand-Alone Management Features

Auto Channel Selection

Auto Transmit Power

Wireless STA (Client) Connected List

Guest Network

Fast Roaming (802.11k & 802.11r)

Pre-Authentication (802.11i, 802.11x)

PMK Caching (802.11i)

RSSI Threshold

Band Steering

Traffic Shaping

VLANs for Access Point – Multiple SSIDs

Backup/Restore Settings

Auto Reboot

E-Mail Alert

Site Survey

Save Configuration as Default

Band Steering

- Prefer 5 GHz

- Force 5 GHz

- Band Balance

Control Features

Managed Mode (w/ezMaster/EnSky Switch)

Distance Control (ACK Timeout)

Multicast Supported

Wi-Fi Scheduler

Client Traffic Status

RADIUS Accounting (802.1x)

Power Save Mode (U-APSD Support)

CLI Support

HTTPS

Wireless Security

WEP Encryption 64/128/152 bit

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

Hide SSID in Beacons

MAC Address Filtering, Up to 32 MACs per SSID

Wireless STA (Client) Connected List

SSH Tunnel

Client Isolation