

Enterprise Access Point **EAP100**

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The industrial-grade **4ipnet EAP100 Enterprise Access Point** with IP50 dust-proof metal housing is designed for high-performance wireless connectivity in either enterprise or industrial environments of all dimensions. It addresses wireless security concerns with the latest industry standards-based security such as 802.1X and Wi-Fi Protected Access with per user, per session encryption. EAP100 features multiple VLAN support coupled with multiple-SSID capability - one AP can simultaneously emulate up to eight Virtual APs with different ESSIDs. By supporting 802.11e/802.1Q QoS and 801.11e WMM, EAP100 ensures

the quality of communication for multimedia applications like voice, audio and video. The dual IEEE 802.3af PoE compliant design not only provides both data transfer and power supply through the same Ethernet cable but supports redundant connectivity with failover function.

FEATURES & BENEFITS

High Speed IEEE 802.11g and Backward Compatible with 802.11b

 Equipped with a high-speed IEEE 802.11g wireless network interface based on Atheros[™] chipset, transmission rates up to 54Mbps

WDS for Extending Wireless Coverage

- Creates structural WDS (Bridge or Repeater) links connecting to other WDS-capable APs
- WDS links can serve as EAP100's LAN connections to replace Ethernet ports, or simply bridge the wired side and the wireless side as a single network

Supporting QoS & 802.11e WMM

- Supports IEEE 802.1p/IEEE 802.1Q Quality of Service (QoS) tagging features
- Supports IEEE 802.11e Wireless Multi-Media (WMM) to fulfill bandwidth thirsty multimedia applications like voice, audio and video

Multiple Virtual APs & Capability of Client Isolation

- Multiple-SSID capability is to use one AP to simultaneously emulate up to 8 Virtual APs with different ESSIDs by utilizing the AtherosTM's virtual AP (VAP) technology and the traffics are separated by using different VLAN IDs
- Supports client isolation, isolated from each other under one AP

IP50 Compliant

 Enclosed in an IP50 compliant metal chassis, durable in industrial environment

Business-class WLAN Security & Client Authentications

- Advanced security options: 64/128/152 bits WEP, WPA/WPA2 with IEEE 802.1X or PSK (Pre-Shared Key)
- Wireless LAN segmentation, Disable SSID Broadcast and the option of station-isolation
- Ability to be configurable to filter out unauthorized wireless clients with build-in MAC-based access control list or via a back-end RADIUS server by sending an authentication request

Multiple Administration Interfaces for Network Management

 Provides friendly web-based management interface and SNMP for management and wireless network deployment

Dual-PoE with Link Failover

- The IEEE 802.3af Power over Ethernet (PoE)
 compliant design eliminates the need for power
 sockets, allows installation of this device in areas
 where power outlets are not readily available to
 improve deployment flexibility, and provides
 standard based compatibility with other device
- Provides dual-PoE 10/100 Fast Ethernet ports with failover function for redundant connectivity

Antenna Diversity & Field Replaceable Antenna

- The antenna diversity design enhances the connection reliability to improve data transmission capability
- Two detachable high-gain antennas for optimal wireless coverage and field replaceable to meet customer demands for specific environment

SPECIFIC ATIONS

Standard Conformance

- ➤ Wireless:
 - (1) IEEE 802.11g (up to 54Mbps)
 - (2) IEEE 802.11b (up to 11Mbps)
- > Ethernet:
 - (1) 802.3
 - (2) 802.30

Wireless Radio

- > Frequency band: 2.4 GHz
- ➤ Wireless architecture:
 - (1) AP mode
 - (2) WDS mode (Repeater / Bridge)
- > Modulation:
 - (1) 802.11b: DSSS (CCK, DBPK, DQPSK)
 - (2) 802.11g: OFDM (64-QAM, 16-QAM, QPSK, BPSK)
- > Channels:
 - (1) USA (Channel 1~11)
 - (2) Japan (Channel 1~14)
 - (3) Europe (Channel 1~13)
- > Transmit Power:
 - (1) 802.11g: Up to 16dBm
 - (2) 802.11b: Up to 18dBm
- ➤ Receiver Sensitivity: -68dBm@54Mbps,
 - -87dBm@11Mbps
- > RF output power: 100mW
- Antenna: 2 x 5dBi detachable antenna (SMA connectors)

Wireless Signal Management

- ➤ Number of ESSIDs (Virtual APs): 8
- ➤ Number of associated clients per AP: 32
- > Setting for maximum number of associated clients
- ➤ Network policy based on ESSID

QoS & WMM

- ➤ DiffServ / TOS
- ➤ IEEE 802.1p/ COS
- ➤ IEEE 802.1 Q Tag VLAN priority control
- ➤ IEEE 802.11e WMM

Handover & Roaming

- ➤ IEEE 802.11f IAPP
- ➤ IEEE 802.11i pre-auth (PMKSA cache)
- ➤ L2 Roaming

System Management

- ➤ Web-based administration
- ➤ SNMP v1/v2c
- > Provides Event Log
- > Syslog information support
- Statistics
- > Configuration backup and restore
- > One-button-click to restore factory default setting
- > Firmware upgrade
- ➤ Capable of performing RADIUS Accounting and Accounting Update

Security

- ➤ WEP (64/128/152 bits)
- ➤ EAP-TLS + Dynamic WEP
- ➤ EAP-TTLS + Dynamic WEP
- ➤ PEAP / MS-PEAP + Dynamic WEP
- ➤ WPA (PSK + TKIP)
- ➤ WPA (802.1X certification + TKIP)
- ➤ 802.11i WPA2 (PSK + CCMP / AES)
- ➤ 802.11i WPA2 (802.1X certification + CCMP / AES)
- > Setting for TKIP / CCMP / AES key's refreshing period
- ➤ Hidden ESSID support
- ➤ MAC Address filtering (MAC ACL)
- ➤ MAC authentication with RADIUS servers
- ➤ Maximum number of registered RADIUS servers: 2

Built-in Servers & Client Interfaces to Other Services

- ➤ DHCP client
- > DNS client
- Syslog client
- > RADIUS client
- ➤ SNMP v1/v2c client

Hardware Specifications

- ➤ Wireless chipset: Atheros 2317
- ➤ Flash Memory: 4 MB
- ➤ SDRAM Memory: 16 MB

Physical and Power

- ➤ AC Input: 110~220 VAC, 50/60 Hz
- DC Output: 12V, 1.5A
- ➤ Form factor: Wall Mountable
- Dimensions (W x D x H): 8.0" x 5.3" x 1.4" (204 mm x 134 mm x 35 mm)
- ➤ Weight: 1.3 lbs (0.61 kg)

Connectors and Display

- ➤ LAN Port: 2 × 10/100 Base-T Ethernet with IEEE 802.3af PoE
- ➤ Console Port: 1 x DB9
- ➤ LED Indicators: 1 × Power, 2 × LAN, 1 × WLAN

Environment

- ➤ Operation Temperature: -20 ~ 50 °C
- ➤ Storage Temperature: -20 ~ 60 °C
- ➤ Operation Humidity: 10% ~ 80% Non-condensing
- ➤ Storage Humidity: 5% ~ 90% Non-condensing

Certifications

- ➤ FCC, CE
- RoHS compliant
- > Metal case compliant with IP50 Standard