Teldat

Windbit WAP840-Iax

WAP840-Iax Wi-Fi 6 WLAN Access Point

Introduction

The WAP840-Iax is a Wi-Fi 6 wireless access point that integrates dual radios, high performance up to 5,375Gbps peak data rate, and enterprise-grade encryption technology. Due to the hybrid cloud management mode and high-density access design, it is suitable for flexible deployment in high-quality network scenarios, such as classroom, dormitory, and office scenarios in the education industry, production workshop and warehouse scenarios in the manufacturing industry, and outpatient clinics and mobile ward rounds scenarios in the medical industry.

Destacar

- **Combo 5G port for ultra-high speed scenarios**

- **Ultra-High Performance 1024QAM/OFDMA**

- **Hybrid Management (Cloud /Controller /Standalone)**

- **High Security(WPA3) and Reliability**

- **Minimal signal interference and up to 1024 clients**

- **Dynamic Frequency Selection (DFS)**

- **Wi-fi Alliance certification**

Interfaces

LAN / WAN 1	1 x 10/100/1000Base-T RJ45 Ethernet port
LAN / WAN 2	1 x 5GE combo port (Copper/Optical)
Radio 1	2.4GHz 11ax: 2×2 MU-MIMO, 802.11b/g/n/ax
Radio 2	5GHz 11ax: 4x4 MU-MIMO, 802.11a/n/ac/ax
Console	1x RJ45 Console Port
USB	1 x USB 3.0 (Type-A connector)

Competitive Advantage

State of Art Wi-Fi Technology	Dual-Radio device, Radio 1:2.4 GHz: 2x2 MIMO, Radio 2:5 GHz: 4x4 MIMO, ready for high density scenarios
Attractive Price-Performance Ratio	Competitive price reaching up to 5.378 Gbps aggregated PHY bitrate and up tp 1024 connected stations.
Simple, efficient administration	Web configuration as standalone AP mode, Cloud Management and Wireless Lan Controller in managed mode.
Easy Installation	Ceiling mount kit, external PSU or Powered over PoE, compatible with PoE injectors. Zero Touch Provisioning with cloud tools or Wireless LAN Controller.

Key Features

- **1024-QAM High-speed Access** With 802.11ax for 5GHz and MIMO 4x4, the maximum access rate can reach 4,8Gbps. If dual-radio is enabled concurrently, the high-speed WiFi throughput can reach 5,378Gbps, offering a true highspeed experience.

- **High Security and Reliability** Encryption and authentication technologies including WiFi Protected Access 3 (WPA3), enhanced open security, 802.1X, and Private Pre-shared Key (PPSK), enhancing data security.

- **All channels bandwidth in 5GHz** Channels can be 20 MHz, 40 MHz, 80 MHz, and 160 MHz

- **Wireless Intrusion Detection System(WIDS)** And User isolation, Rogue AP detection and containment. CPU Protect Policy (CPP). Network Foundation Protection Policy (NFPP).

- **Power for external device if PoE++ is available** When powered by 802.3bt (PoE++), the AP can supply power to an external device.
  - The USB port can source 1 A/5 W power to an attached device.
  - The LAN 2 port can source 48 V/12.95 W power to an IoT unit.

- **OFDMA High-density User Access** By scheduling multiple users to receive and send packets concurrently via the AP, user competition and back-off can be reduced, thereby reducing network latency, and improving network efficiency.

- **Improved signal quality** It supports Cyclic Delay/Shift Diversity (CDD/CSD), Maximum Ratio Combining (MRC), Space-Time Block Coding (STBC), and Low-Density Parity Check (LDPC).

- **High number of BSSIDs** Network administrators can separately encrypt and isolate VLANs or subnets of the same SSID, thereby enabling specified authentication modes for each SSID. It supports up to 32 (16 BSSIDs per radio).

- **IPv4/IPv6 services** DHCPv4 server, NAT4, Neighbor Discovery (ND), ICMPv6,IPv6 DHCP client, static routing, PPPoE client, IPsec VPN.

CARACTERíSTICA TéCNICA DEL HARDWARE

Interfaces and connectors
1x 10/100/1000Base-T RJ45 Ethernet port with auto-negotiation
1x 5/2,5/1GE combo SFP, 100/1000/2500/5000Base-T RJ45 Ethernet
1 x RJ45 console port. 1 x Bluetooth 5.1

Antennas
4x WLAN Integrated Omnidirectional
Antenna Gain 2.4GHz: 5,9dBi 5GHz: 6,2dBi
1x onboard bluetooh omnidirectional antenna 4,6 dBi.

Dimensions and casing
230 mm x 230 mm x 51 mm
Weight. Device: 1.0Kg Mounting Kit: 0.1Kg
Wall/Ceiling-mount (a mounting bracket is delivered with the main unit)

Two WLAN radio modules
Radio 1: 2.4G 11ax: 2x2 MU-MIMO, 802.11b/g/n/ax
Radio 2: 5G 11ax: 4x4 MU-MIMO, 802.11a/n/ac/ax

Input power supply options to be purchasd independently
54 V DC/1.1 A power input over DC connector:
PoE input over LAN 1, it complies with IEEE 802.3af/at/bt standards.
Maximum power consumption: 40W, Idle mode: 10,3 W

Environmental Specifications
Operating temperature: -10°C~50°C
Storage temperature: -40°C~70°C
Operating humidity: 5%~95% (non-condensing)

CARACTERíSTICA TéCNICA DEL SOFTWARE

Wi-Fi Interface
Maximum clients per AP: 1024 (up to 512 STAs per radio)
SSID Hiding, 5G Priority (Band Steering)
SSID: authentication mode, encryption mechanism and VLAN attributes

Security
PSK, Web, and 802.1x, WPA (TKIP), WPA2 (AES), WPA-PSK,
WPA3,WEP(64/128bits)
User isolation, Rogue AP detection and countermeasure, Dynamic ACL
RADIUS, CPU Protection Policy (CPP), Network Foundation Protection
Policy

ACL filtering
IP standard ACL, MAC extended ACL, IP extended ACL, and expert-level
ACL
IPv6 ACL Time range-based ACL ACL based on a Layer 2 interface
ACL based on a Layer 3 interface Ingress ACL based on a wireless
interface

STA limiting
SSID-based STA limiting, Radio-based STA limiting
Bandwidth limiting
STA/SSID/AP-based rate limiting

VLAN
Max. number of SVIs: 200
Max. number of VLANs: 4,094
VLAN ID range: 1–4,094

IPv4 services
Static and DHCP-assigned IPv4 addresses
Max. number of IPv4 addresses configured on each Layer 3 interface: 200
NAT, FTP ALG and DNS ALG

IPv6 services
IPv6 addressing, Neighbor Discovery (ND), ICMPv6, IPv6 ping, IPv6
tracert
IPv6 DHCP client
Max. number of IPv6 addresses configured on each Layer 3 interface: 400

IP routing
IPv4/IPv6 static route
Max. number of static IPv4 routes: 1,024
Max. number of static IPv6 routes: 1,000

Multicast
Multicast-to-unicast conversion

Management and Maintenance
Telnet, SSH, TFTP, Web, WLAN Controller, Cloud Controller
SNMPV1,V2c,V3, Syslog / Debug
Wireless Intelligent AI Optimization Service (WIS)

CARACTERíSTICA TéCNICAS ADICIONALES

Certifications
CE Marked RED Directive 2014/53/EU EMC Directive 2014/30/EU
Low Voltage Directive 2014/35/EU EN 300 328, EN 301 489-1, EN 301
489-17,
EN 301 893,EN 50385,EN 55032,EN 55035,EN 62368-1,EN 62479.

Lock option
Kensington lock and securing latch
Other buttons
1 x Reset button

System memory
512 MB DRAM, 128 MB flash
Mean Time Between Failure (MTBF)
200,000 hours (22 years) at the operating temperature of 25°C (77°F)

1 x multi-color system status LED
AP power-on status, Software initialization status and upgrade status
Uplink service interface status, Wireless user online status
CAPWAP tunnel timeout, Specific AP locating

Scenarios