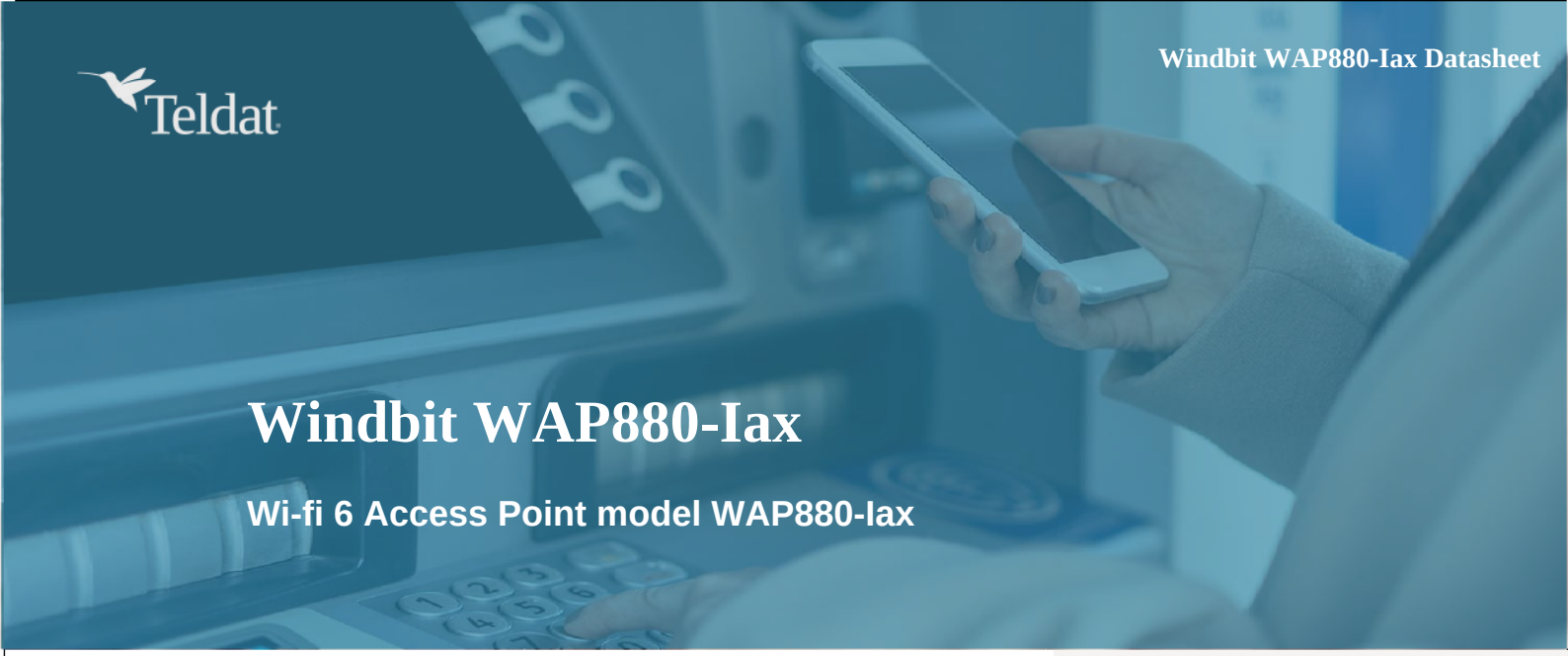


Windbit WAP880-Iax

Wi-fi 6 Access Point model WAP880-Iax

Introduction

The WAP880-Iax is a quad-radio Wi-Fi 6 wireless access point that delivers high performance with a peak data rate of up to 7.780 Gbps and enterprise-grade encryption technology including WPA3. With its hybrid cloud management mode and high-density access design, it is suitable for flexible deployment in corporate remote office scenarios such as education, government agencies, tourism, and catering, where high-capacity connected terminals and a premium user experience are required.

Highlight

- **High-speed combo port up to 5Gbps, copper or optical**
- **High performance thanks to QAM/OFDMA technologies**
- **Flexible management (Cloud/Controller/Standalone)**
- **High security (WPA3) and reliability**
- **Interference minimization and up to 1536 connected clients**
- **Dynamic Frequency Selection (DFS)**
- **AI Radio, 2.4 GHz/5 GHz spectral analysis**

Interfaces

LAN / WAN 1	1 x 100/1000/2.5G/5GBASE-T (PoE IN)
LAN / WAN 2	1 x 1/2,5/5GE SFP combo with base-T port (Optical)
Radio 1	2.4G 11n/ax: 2×2 MIMO
Radio 2	5G 11n/ac/ax: 2x2 MU-MIMO
Radio 3	5G 11n/ac/ax: 4x4 MU-MIMO
Radio 4	AI Radio, 2.4 GHz/5 GHz: 2x2 MIMO
Others	1x USB 3.0 (A Type), BT 5.1, RJ45 console

Competitive Advantages

High-density user technology	Corporate-grade equipment with four Wi-Fi radios and up to eight data streams, the optimal solution for high-density scenarios.
Intelligence for Wi-Fi Optimization	With the AI radio module of the equipment, the AP environment is scanned in real time, allowing for intelligent network optimization.
Simple and efficient management	Flexible for all scenarios: Web configuration in standalone access point mode, or cloud management or prepared for a wireless LAN controller
Captive portal, radio planning, AI	The management solution incorporates tools that do not have to be outsourced, which allows for a considerable reduction in costs.

Key Features

- **High-speed 1024-QAM radio access** With 802.11ax and 1024-QAM modulation, the maximum access rate at 5GHz can reach 7.2 Gbps. With all three radios activated simultaneously, they deliver up to 7.78 Gbps, a truly high-speed experience.
- **High security and reliability** Encryption and authentication technologies including Wi-Fi Protected Access 3 (WPA3), Enhanced Open Security, 802.1X, and Pre-Shared Private Key (PPSK) enhance data security.
- **Channel width up to 160 MHz** Channels can be 20 MHz, 40 MHz, 80 MHz and 160 MHz.
- **Wireless Intrusion Detection System (WIDS)** User isolation, detection, and containment of unauthorized access points. CPU Protection Policy (CPP). Network Foundation Protection Policy (NFPP).
- **Power other IoT devices** When powered by 802.3bt (PoE++), the AP can supply power to an external device. - USB: up to 1A/5W. LAN 2: up to 48V/12.95W to an IoT device.
- **High user density thanks to OFDMA** OFDMA allows multiple users to receive/send packets simultaneously through the AP, minimizing user contention and forwarding, which reduces network latency and improves network efficiency.
- **Improved signal quality** Supports cyclic shift/delay 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 encrypt and isolate individual VLANs or subnets of the same SSID, with SSID-specific authentication modes. Supports up to 48 (16 BSSIDs per radio)
- **Pv4/IPv6 Services** DHCPv4 Server, NAT4, Neighbor Discovery (ND), ICMPv6, IPv6 DHCP Client, Static Routing, PPPoE Client, IPsec VPN

HARDWARE TECHNICAL FEATURE

Interfaces and connectors
1x 100/1000/2.5G/5GBASE-T RJ45 IEEE 802.3af/at/bt (PoE/PoE+/ PoE++)
1 x 1/2,5/5GE SFP port combo with RJ45 port
1 x 10/100/1000BASE-T RJ45, PoE Out 48 V/12.95W for IoT devices

Quad-radio device
Radio 1 – 2.4 GHz: 2x2 uplink/downlink MU-MIMO, 802.11n, ax
Radio 2 – 5 GHz: 2x2 uplink/downlink MU-MIMO, 802.11n/ac/ax
Radio 3 – 5 GHz: 4x4 uplink/downlink MU-MIMO, 802.11n/ac/ax

Antennas
Array of 8x omnidirectional integrated Wi-fi 6
2x Antennas 2,4GHz. 5,5dBi gain
6x Antennas 5GHz. 7dBi gain

Power Options (Ordered separately)
54V DC/1.1A DC power supply
PoE injector/IEEE 802.3af/at/bt LAN port 1
Maximum power consumption: 40W*, Idle mode: 12.2W

Dimensions, weight, and mounting kit
230 mm x 230 mm x 51 mm
Weight: 1.0 kg, mounting kit: 0.1 kg
Wall/ceiling kit included by default

Environmental Specifications
Operating Temperature: -10°C–50°C, Storage Temperature: -40°C–70°C
Operating Humidity: 5%–95%. Storage Humidity: 5%–95%. (Non-condensing)
Operating Altitude Range: –500 m to +5,000 m

SOFTWARE TECHNICAL FEATURE

Wi-Fi Interface
Maximum number of users per AP: 1536 (up to 512 per radio)
Hide SSID, 5GHz priority (Band Steering)
SSID: authentication mode, encryption mechanism, and VLAN attributes

Security Methods
PSK, Web, and 802.1x, WPA (TKIP), WPA2 (AES), WPA-PSK, WPA3 and WEP
User Isolation, Rogue APs and Containment, Dynamic ACLs
RADIUS, CPU Protection Policy (CPP), Network Foundation Protection Policy

Filtering with ACLs
ACL IP estandard, MAC extended ACL, IP extended ACL, y expert-level ACL
Time-range-based IPv6 ACLs, Layer 2 interface-based ACLs
Layer 3 interface-based ACLs. Ingress ACLs based on Wi-Fi interfaces

Connection Control and Limitations
Connection Limitation by SSID or Radio Interface
Bandwidth Limitation
STA/SSID/AP-based rate limiting

VLAN details
Maximum number of SVIs (IPv4): 200
Maximum number of SVIs (IPv6): 200
Maximum number of VLANs: 4,094, VLAN ID range: 1–4,094

IPv4 Services
Static Addressing or DHCP Client
Maximum number of IPv4 addresses configured per N3 interface: 200
NAT, FTP ALG and DNS ALG

IPv6 Services
IPv6 addressing, Neighbor Discovery (ND), ICMPv6, IPv6 ping, IPv6 tracert
IPv6 DHCP client
Maximum number of IPv6 addresses configured per N3 interface: 400

IP Routing
IPv4/IPv6 Static Routes
Maximum number of IPv4 static routes: 1,024
Maximum number of IPv6 static routes: 1,000

Multicast & VPN
Multicast-to-Unicast Conversion
PPPoE Client
IPSec VPN

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

ADDITIONAL TECHNICAL FEATURE

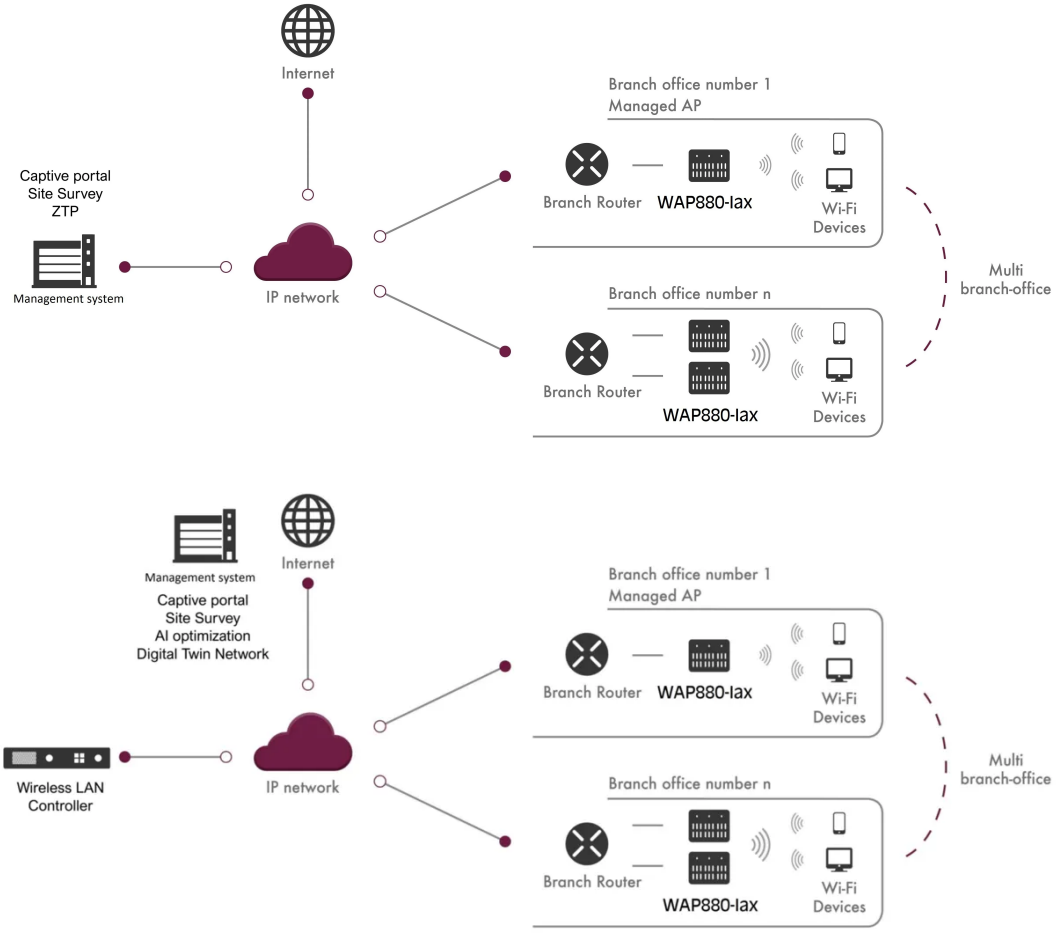
Certifications
EN 55032, EN 55035, EN 61000-3-3, EN IEC 61000-3-2, EN 301 489-1, EN 301 489-3,
EN 301 489-17, EN 300 328, EN 301 893, EN 300 440, FCC Part 15, EN IEC 62311, IEC 62368-1, and EN 62368-1

Memory
512 MB DRAM, 256 MB flash
Mean Time Between Failure (MTBF)
200,000 horas (22 años) a 25°C (77°F)

Security lock option
Kensington lock
Other buttons
1x reset(To delete config/From factory reset)

1x multi-color LED for system status
AP status. Software update
Uplink interface status. Connected users
CAPWAP management connection status.

Scenarios



Founded in 1985, Teldat is a Spanish company whose mission is to provide companies with valuable solutions for cloud access, remote office communications, cybersecurity and voice/data connectivity both in the office and in specific environments whether they are industrial, railway, vehicles or public services.

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