

Introduction

The bintec W2022ac is an access point based on the latest 802.11ac that supports MU-MIMO. This allows single-antenna mobile devices to optimize all the transmission streams of the access point and doubles the quantity of devices simultaneously connected compared to 802.11ac first-generation. Older devices can still connect thanks to WPA3 /2 mode. When it comes to installation, this is child's play using the WLAN-Controller integrated in almost all CIT Routers or benefiting from the new SD-WAN solution be.SDx.



Product Highlights

- ▶ 802.11ac/Wi-Fi 5 access point with MU-MIMO
- ▶ 867Mbps @ 5GHz and 400Mbps * @ 2.4GHz
- ▶ Simultaneous operation in the 2.4 and 5 GHz band
- ▶ Flexible management solutions
- ▶ Easiest ceiling mounting on system ceilings

Product Description

The bintec W2022ac is an access point based on the latest 802.11ac MU-MIMO that allows single-antenna mobile devices to use all the transmission streams of the access point. Compared to 802.11ac first-generation APs, which supports only SU-MIMO, twice as many mobile devices can connect to the W2022ac without sacrificing performance. Equipped with two Gigabit LAN interfaces and two optimized single-band antennas per radio module. It includes airtime fairness and client band select to 5GHz. Supports 20/40/80 MHz channels, beamforming, MRC, Block-Acknowledge, STBC and LDPC. Regarding worth-mentioning security and functionality methods, it supports WPA3-Personal, WPA3-Enterprise, WPA3/2 mode and secure Opportunistic Wireless Encryption method (OWE), among other legacy methods such as short guard interval, ACLs and WIPS/WIDS. The W2022ac can operate as a standalone AP or be managed by a Teldat router (WLC) or the new SD-WAN beSDx.

Competitive Advantage

Communication Technology	802.11ac/Wi-Fi 5 MU-MIMO
Optimized software	Supporting many concurrent users with good performance
Simple, efficient administration	Web configuration (http/https), CAPWAP support from WLAN Controller in Teldat router, SDWAN be.SDx
Easy Installation	Ceiling mount kit, Powered over PoE IEEE 802.3af, compatible with 802.3at PoE injectors

HARDWARE TECHNICAL FEATURES

Interfaces and connectors

LAN/WAN: 2 x 10/100/1000 Mbps Ethernet, autosensing, auto MDI/MDI-X
1 x 802.11bgn (2.4 GHz) 2x2MIMO, 1 x 802.11ac/an (5 GHz) 2x2 MU-MIMO

Power supply

External wall power supply 230V / 12V DC, 1A
high efficient switching power supply
PoE : IEEE 802.3af, compatible with 802.3at PoE injectors

Environmental Specifications and consumption

Temperature operating: 0°C to 40°C; storage: -10°C to 70°C
Relative humidity 10 to 95% (non condensing)
Max: 8.95 Watt

Antennas

Integrated two antenna elements for each radio
2 dBm gain @ 2,4 GHz; 3 dBm gain @ 5 GHz.

Dimensions and casing

Approx. 190 mm x 190 mm x 38 mm (width x depth x height)
Approx. 505 g
Status LEDs, Activity for WLAN1, WLAN2 and Ethernet, LEDs defeatable

SOFTWARE TECHNICAL FEATURES

Wi-Fi Interface

Beamforming, Low SNR threshold management, Data rate trimming, Client Band
Broadcast SSID
IGMP Snooping, Multicast to Unicast converting of WLAN data.

IEEE802.11i Authentication and encryption

802.1x/EAP-MD5, 802.1x/EAP-TLS, 802.1x/EAP-TTLS, 802.1x/EAP-PEAP, key
manag
OWE-Transition, OWE, Open

Detection mechanisms

MAC address filter for WLAN clients (white list)
WIDS (Wireless Intrusion Detection System); Rogue AP, Neighbor AP

Operating Modes

Standalone AP
Managed by a Teldat router
Managed from beSDx

Energy Management

MIMO 1x1 shift down
802.3az support, U-APSD: Unscheduled Automatic Power Save Delivery
LED Mode; Status, Flashing, Off

Wi-Fi optimization

Airtime Fairness, Client overload protection; Clients shifting between APs
Client Band Select, Data rate trimming, Fast BSS Transition 802.11r
802.11k/v/r, IAPP, support according 802.11f, Low SNR threshold management

WLAN Security Modes

WPA3-SAE, WPA2/3-PSK, WPA2-PSK, WPA1/2-PSK, WPA-PSK, WPA-
Enterprise,
WPA3-Enterprise, WPA2-Enterprise, WPA2/3-Enterprise, WPA1/2-Enterprise,
Up to 8 different RADIUS servers for WPAX Enterprise to individuals SSIDs

Management/administration

Cloud Management via beSDx, ZTP,
WLAN Controller; Discovery protocol, Active/Deactive WLAN SSID
Background scanning, Performance Monitoring

Power optimization

U-APSD

VLANs

Per SSID one VLAN ID available.
Static VLAN configuration according IEEE 802.1q; up to 16 VLANs supported.
Network segments on layer2 possible.

ADDITIONAL TECHNICAL FEATURES

Certifications

Directive 2014/53/EU, 2011/65/EU, 2009/125/EU, EN 60950-1; EN 62311;
EN 301489-1; EN301489-17; EN 300 328; EN 301893; EN 50581;
EN 60601-1-2 (Medical devices - part 1-2)

Open Source Information at bintec's webpage

<https://www.bintec-elmeg.com>

Additional components

MS5500002091 Power supply 12V with EU socket
MSXXXXXXX Power Supply Unit - Interchangeable plug (on development)
MS5530000338 Gigabit PoE Injector
MS5520000163 Ceiling mounting W2022ac

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