DATASHEET











General data

Supports wireless transfer rates of up to 574Mbit/s (2.4GHz) or 2401Mbit/s (5GHz), 3000Mbit/s total
Supports OFDMA and MU-MIMO
Compatible with IEEE 802.11a/b/g/n/ac/ax and Wave 2 standards
Built-in 2 x 2 MIMO antenna
Multi-operation modes for different wireless applications
Features up to 8 SSIDs to separate network traffic
High power and reception sensitivity for optimal signal coverage and increased data throughput
Supports WPA3 encryption
Weatherproof IP-67 housing

The LevelOne WAB-8021 is a stand-alone AX3000 omni-directional outdoor dual-band Wi-Fi 6 PoE wireless access point that features Gigabit Ethernet ports and modern 802. 11ax Wave 2 MU-MIMO (Multi-User Multiple-Input Multiple-Output), which allows multiple devices to simultaneously receive a high-bandwidth Wi-Fi signal and distribute the data more efficiently. It offers a combined speed of up to 2976 Mbps (574 Mbps in 2.4 GHz / 2401 Mbps in 5 GHz) and an outdoor omnidirectional transmission range of up to 100 m.
The device runs on the 2.4 and 5 GHz frequencies and offers support for the new WPA3 encryption. Of course, the WAB-8021 is also equipped with PoE, which eliminates the need for an additional power supply and makes installation easier. The advanced IP67 weatherproof design means the WAB-8021 is designed for outdoor use and can withstand rain, moisture, dust and snow. A fast, versatile and secure access point for a variety of outdoor networking needs.

This datasheet was created automatically on 08-11-2026 . Technical changes reserved.

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WIR SORGEN FÜR VERBINDUNG
WE CARE FOR CONNECTION

General
Color white

Features
● Web-Based GUI Configuration
● Multiple SSID (4 SSID for 2.4GHz, 4 SSID for 5GHz)
● Weatherproof IP67-rated housing

Miscellaneous
Frequency band 2.4/5GHz(Dual bands)
PoE Supported Yes
Wireless AP type Outdoor
Max Wi-Fi Data Rate 3000Mbps

Others
Approvals and Compliance
● CE
● RED
● RoHS
Operating humidity 10% RH ~ 90% RH
Operating temperature -20°C ~ 50°C
Storage humidity 5% RH ~ 95% RH
Storage temperature -20°C ~ 80°C

scope of delivery
● WAB-8021
● IP67 Plastic Waterproof Nylon Cable Gland
● Pole Mounting Hose Clamp (59-82mm)
● RJ45 Network Cable
● Quick Installation Guide
● Declaration of Conformity

performance
Reception sensitivity (dBm) 2.4 GHz radio:
● 802.11b / 1Mbps / RX Sensitivity: -90 (dBm)
● 802.11b / 11Mbps / RX Sensitivity: -85 (dBm)
● 802.11g / 6Mbps / RX Sensitivity: -90 (dBm)
● 802.11g / 54Mbps / RX Sensitivity: -72 (dBm)
● 802.11n HT20 / MCS0 / RX Sensitivity: -87 (dBm)
● 802.11n HT20 / MCS7 / RX Sensitivity: -70 (dBm)
● 802.11n HT40 / MCS0 / RX Sensitivity: -85 (dBm)
● 802.11n HT40 / MCS7 / RX Sensitivity: -68 (dBm)
● 802.11ax HE20 / MCS0 / RX Sensitivity: -83 (dBm)
● 802.11ax HE20 / MCS11 / RX Sensitivity: -60 (dBm)
● 802.11ax HE40 / MCS0 / RX Sensitivity: -83 (dBm)

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● 802.11ax HE40 / MCS11 / RX Sensitivity: -56 (dBm)
5GHz radio:
● 802.11a HT20 / 6Mbps/ RX Sensitivity: -92 (dBm)
● 802.11a HT20 / 54Mbps/ RX Sensitivity: -72 (dBm)
● 802.11n HT20 / MCS0 / RX Sensitivity: -90 (dBm)
● 802.11n HT20 / MCS7 / RX Sensitivity: -70 (dBm)
● 802.11n HT40 / MCS0 / RX Sensitivity: -88 (dBm)
● 802.11n HT40 / MCS7 / RX Sensitivity: -68 (dBm)
● 802.11ac VHT20 / MCS0 / RX Sensitivity: -88 (dBm)
● 802.11ac VHT20 / MCS8 / RX Sensitivity: -70 (dBm)
● 802.11ac VHT40 / MCS0 / RX Sensitivity: -88 (dBm)
● 802.11ac VHT40 / MCS7 / RX Sensitivity: -68 (dBm)
● 802.11ac VHT80 / MCS0 / RX Sensitivity: -85 (dBm)
● 802.11ac VHT80 / MCS9 / RX Sensitivity: -58 (dBm)
● 802.11ax HE20 / MCS0 / RX Sensitivity: -88 (dBm)
● 802.11ax HE20 / MCS11 / RX Sensitivity: -62 (dBm)
● 802.11ax HE40 / MCS0 / RX Sensitivity: -86 (dBm)
● 802.11ax HE40 / MCS11 / RX Sensitivity: -58 (dBm)
● 802.11ax HE80 / MCS0 / RX Sensitivity: -84 (dBm)
● 802.11ax HE80 / MCS11 / RX Sensitivity: -55 (dBm)
● 802.11ax HE160 / MCS0 / RX Sensitivity: -82 (dBm)
● 802.11ax HE160 / MCS11 / RX Sensitivity: -51 (dBm)
Physical Specifications
Dimensions (W x D x H) 230 x 107 x 38 mm
Product weight (kg) 1.3
System specifications
Antenna 2 Built-in 5dBi MIMO 2.4GHz Omnidirectional Antenna, 2 Built-in 7dBi MIMO 5GHz Omnidirectional Antenna
EIRP (dBm) < 20 dBm
Encryption WPA2 Personal (AES), WPA3 Personal (AES)
Flash memory size 8 MB (SPI NOR), 128 MB (SPI NAND)
Frequency band 2.412 to 2.484 GHz, 5.18GHz to 5.825GHz
indicator
● Power
● System
● WIFI status
Fixing pole mount
Operating mode Gateway Mode, Repeater Mode, AP Mode
Port configuration 1 x LAN/WAN PJ45 ports (10/100/1000 Base-T)
Energy consumption < 16W
RAM size 512 MB
Standards
● IEEE 10BASE-T (IEEE 802.3)
● IEEE 100BASE-TX (IEEE 802.3u)
● IEEE 1000BASE-T (IEEE 802.3ab)
● IEEE 802.11a/b/g/n/ac/ax

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WE CARE FOR CONNECTION

● IEEE 802.3at Power over Ethernet
Wireless channels ● 2,412 to 2,484 GHz: CH 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 ● 5,150GHz to 5,850GHz : CH 36, 40, 44, 48 , 52, 56, 60, 64, 100, 104, 108, 116, 120, 124, 128, 132, 140, 149, 153, 157, 161, 165

Tekniske egenskaber

Available variants

ArtNr.	Bezeichnung	Unique
WAB-8021		Unique

Note on Intended Use

This data sheet is intended solely to describe the technical characteristics of the product. It does not replace an assessment of the product's suitability for a specific application. The user is responsible for ensuring that the product is used in accordance with its technical specifications and applicable legal and regulatory requirements.

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