

# Wireless Access Point / Bridge / Client Value Line

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**IE-WL-VL-AP-BR-CL-EU**

**IE-WLT-VL-AP-BR-CL-EU**

**IE-WL-VL-AP-BR-CL-US**

**IE-WLT-VL-AP-BR-CL-US**

(from product Rev. 2.2.0)

## Hardware Installation Guide

**Third Edition, December 2018**

**2581020000/02/12.18**

### **Important note:**

This document and additional product information can be downloaded using following link:

<http://www.weidmueller.com>

- ▶ Select **Product Catalogue**
- ⇒ Select „Active Industrial Ethernet“
  - ⇒ Select „WLAN AP/Bridge/Client“
  - ⇒ Select Product model
    - ⇒ Click and expand section „Downloads“
    - ⇒ Download needed software or documentation

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**Weidmüller** 

# Overview

Weidmüller Wi-Fi devices are ideal for applications that are hard to wire, too expensive to wire, or use mobile equipment that connects over a TCP/IP network. The devices meet the growing need for faster data transmission speeds by supporting IEEE 802.11n technology with a net data rate of up to 300 Mbps. The Wi-Fi devices are compliant with the industrial standards and approvals, covering operating temperature, power input voltage, surge, ESD and vibration. The two redundant DC power inputs increase the reliability of the power supply. The devices can operate on either the 2.4 or 5 GHz bands and are backwards-compatible with existing 802.11a/b/g deployments.

The Wi-Fi devices are rated to operate at temperatures ranging from -25°C to 60°C for standard models and -40 to 75°C for extended temperature models and are rugged enough for any harsh industrial environment.

## Package Checklist

Your Ethernet Switch is shipped with the following items. If any of these items is missing or damaged, please contact your Weidmüller customer service for assistance.

- 1x Wireless Access Point/Bridge/Client
- 2x Dual-band omni-directional antennas, 2 dBi, RP-SMA (male)
- Hardware Installation Guide (printed)
- 1x Cable holder with one screw
- 2x RJ-45 protective cap for console port

### Brief Information for quick access to the Web interface

The Web interface of the Wireless Access Point/Bridge/Client can be accessed via IP address 192.168.1.110 and subnet mask 255.255.255.0 (Factory default value).

Connect the PC to the LAN port of the Wireless Access Point/Bridge/Client and set the PC's IP address to a free one of range 192.168.1.0 / 255.255.255.0

Start a web browser and enter the IP address of the connected Wi-Fi device into the browser's address line.

**<http://192.168.1.110>**

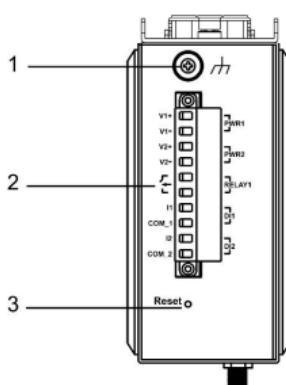
After the appearance of the login prompt, please enter following login data (factory settings):

User name: **admin**  
Password: **Detmold**

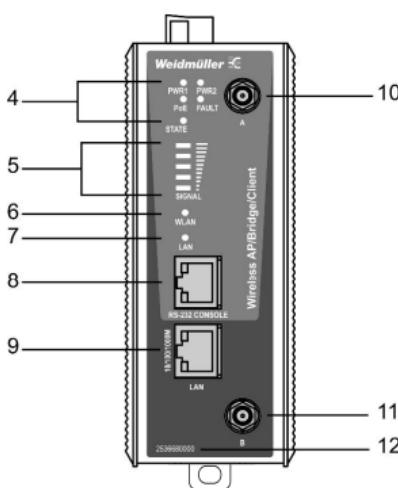
For general settings of the Switch parameters please refer to the manual.

# Panel Layout of IE-WL(T)-VL-AP-BR-CL-EU/US

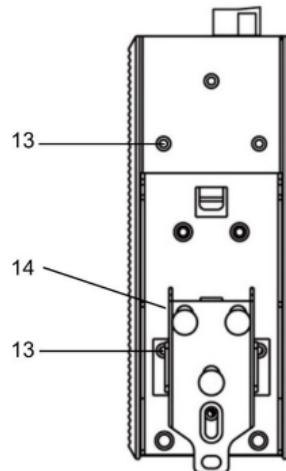
Top Panel View



Front Panel View

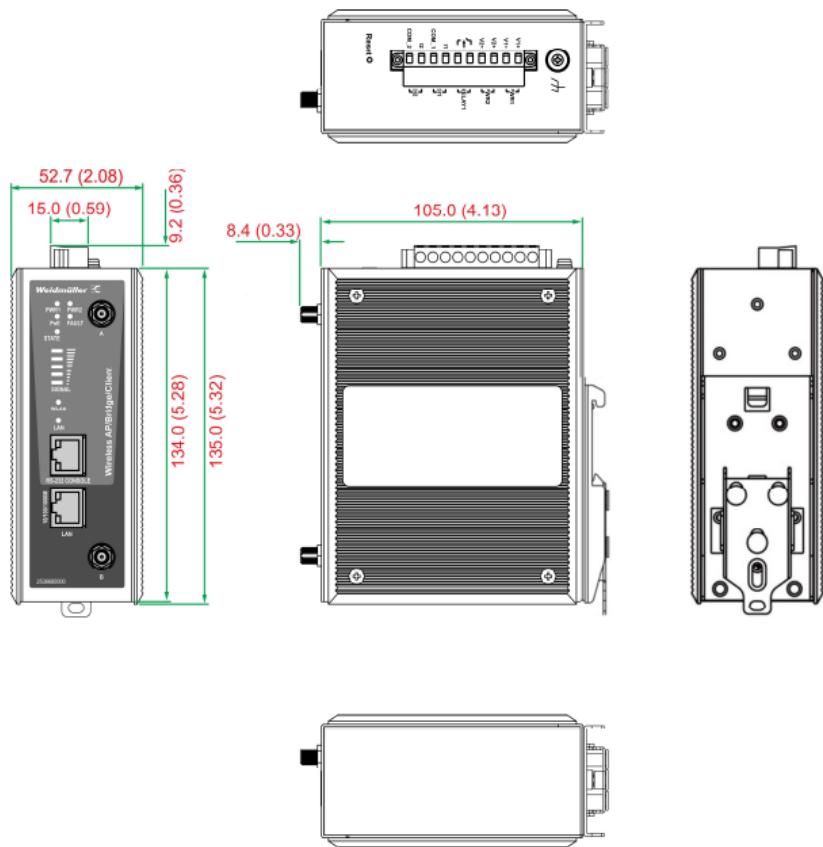


Rear Panel View



1. Grounding screw (M5)
2. Terminal block for PWR1, PWR2, relay, DI1, and DI2
3. Reset button
4. System LEDs: PWR1, PWR2, PoE, FAULT, and STATE
5. LEDs for WLAN signal strength
6. WLAN LED
7. Ethernet LED
8. RS-232 console port
9. LAN: 10/100/1000 BaseT(X) RJ45 Port
10. Antenna A
11. Antenna B
12. Article number
13. Screw holes for wall-mounting kit
14. DIN-rail mounting kit

# Mounting Dimensions



Units = mm (inch)

## DIN-Rail Mounting

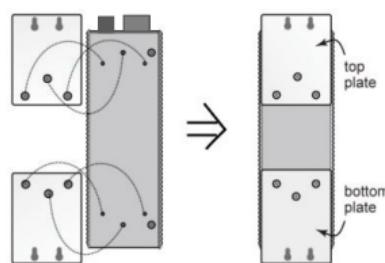
When shipped, the metal DIN-rail mounting kit is fixed to the back panel of the WLAN device. Mount the WLAN device on to a corrosion-free mounting rail that adheres to the EN 60715 standard.

<b>Mount STEP 1:</b> Insert the upper lip of the DIN-rail kit into the mounting rail.	<b>Mount STEP 2:</b> Press the WLAN device towards the mounting rail until it snaps into place.	<b>Remove:</b> <b>Step 1:</b> Pull down the latch on the DIN-rail kit with a screwdriver. <b>Step 2/3:</b> Slightly pull the WLAN device forward and lift it up to remove it from the mounting rail.

# Wall Mounting (optional)

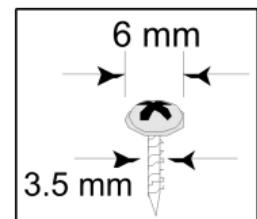
For some applications, you will find it convenient to mount the Wi-Fi device on the wall, as shown in the following figures.

**STEP 1:** Remove the aluminum DIN-Rail attachment plate from the switch rear panel, and then attach the wall mount plates as shown in the diagram at the right.



## STEP 2:

Mounting the Wi-Fi device on the wall requires 4 screws. Use the device, with wall mount plates attached, as a guide to mark the correct locations of the 4 screws. The heads of the screws should be less than 6.0 mm in diameter, and the shafts should be less than 3.5 mm in diameter, as shown in the figure at the right.

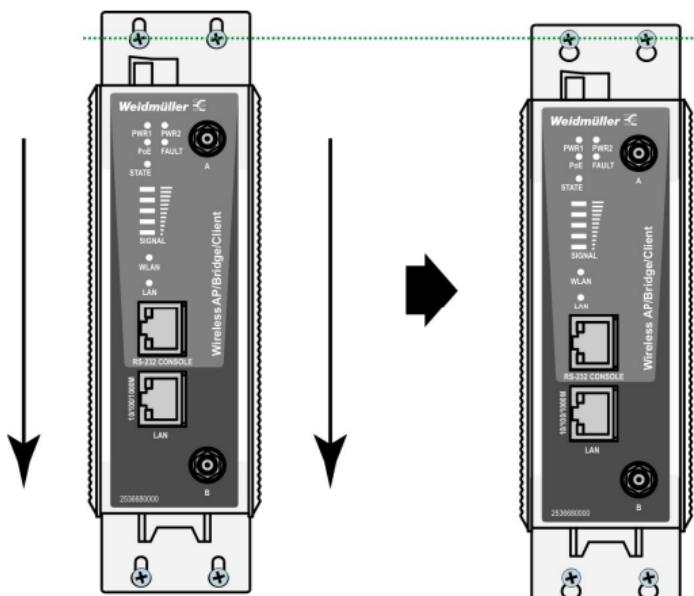


**NOTE** Before tightening the screws into the wall, make sure the screw head and shank size are suitable by inserting the screw into one of the keyhole-shaped apertures of the wall mounting plates.

Do not screw the screws in completely leave about 2 mm to allow room for sliding the wall mount panel between the wall and the screws

## STEP 3:

Once the screws are fixed on the wall, insert the four screw heads through the large parts of the keyhole-shaped apertures, and then slide the switch downwards, as indicated. Tighten the four screws for added stability.



# Wiring Requirements



## WARNING

### Safety First!

Be sure to disconnect the power cord before installing and/or wiring the Wireless Access Point/Bridge/Client. Calculate the maximum possible current in each power wire and common wire. Observe all electrical codes dictating the maximum current allowed for each wire size. If the current goes above the maximum ratings, the wiring could overheat, causing serious damage to your equipment.

You should also pay attention to the following items:

- Use separate paths to route wiring for power and devices. If power wiring and device wiring paths must cross, make sure the wires are perpendicular at the intersection point.

**NOTE** Do not run signal or communications wiring and power wiring in the same wire conduit. To avoid interference, wires with different signal characteristics should be routed separately.

- You can use the type of signal transmitted through a wire to determine which wires should be kept separate. The rule of thumb is that wiring with similar electrical characteristics can be bundled together.
- Keep input wiring and output wiring separate.
- It is strongly advised that you label wiring to all devices in the system when necessary.



### ATTENTION

This product is intended to be supplied by a Listed Power Unit marked "Class 2" or "LPS" and rated O/P: 7.2 W.



### ATTENTION

Make sure the external power adaptor (includes power cords and plug assemblies) provided with the unit is certified and suitable for use in your country.



### ATTENTION

Do not use a legacy PoE injector that doesn't meet the IEEE 802.3 af/at standard. Due to missing mechanism to negotiate before power delivery, it may destroy the Wi-Fi device. Instead, please use an IEEE 802.3af or IEEE 802.3at compliant PSE (Power Sourcing Equipment) for powering the Wi-Fi device by PoE.

# Grounding the Wireless Access Point/Client

Grounding and wire routing help limit the effects of noise due to electromagnetic interference (EMI). Run the ground connection from the ground screw to the grounding surface prior to connecting devices.

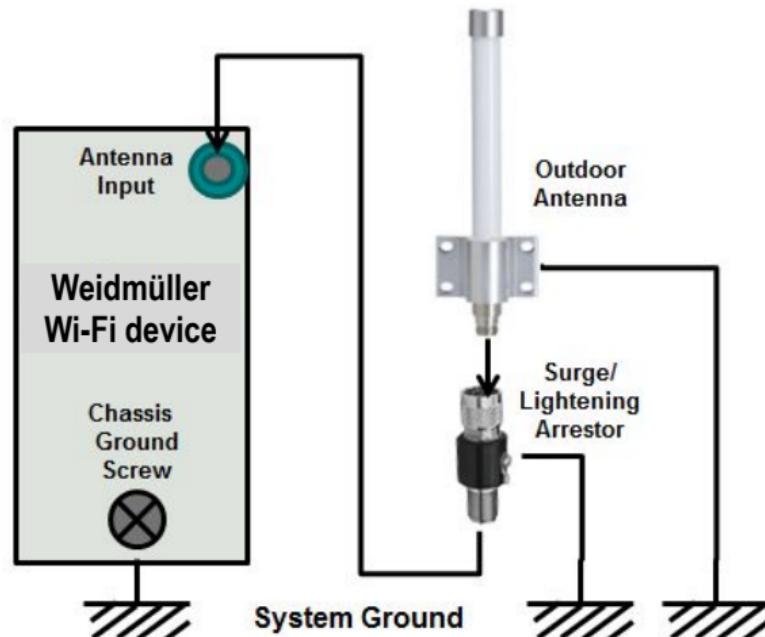


## ATTENTION

This product is intended to be mounted to a well-grounded mounting surface, such as a metal panel. There must be no electrical potential difference between any two grounding points; otherwise, there is a risk that the device could be destroyed.

## Installations with Cable Extended Antennas for Outdoor Applications

If the antenna or the Wireless Access Point/Bridge/Client is installed outdoors or in an open-air setting, proper lightning protection is required to prevent direct lightning strikes on the device. To prevent coupling currents from nearby lightning strikes, a lightning arrester should be installed as part of your antenna system. Ground the device, antenna, as well as the arrester properly to provide maximum outdoor protection for the device.

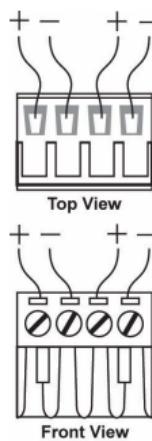


## Arrester Accessories

- **N Connector / M-F (8947830000):** Surge arrester, N-type (male) to N-type (female), Frequency 0 – 3,5 GHz

# Wiring the Redundant Power Inputs

The top two pairs of contacts of the 10-contact terminal block connector on the Wireless Access Point/Bridge/Client's top panel are used for the two DC inputs. Top and front views of the terminal block connector are shown here.



**STEP 1:** Insert the negative/positive DC wires into the V-/V+ terminals.

**STEP 2:** To keep the DC wires from pulling loose, use a small flat-blade screwdriver to tighten the wire-clamp screws on the front of the terminal block connector.

**STEP 3:** Insert the plastic terminal block connector prongs into the terminal block receptor, which is located on Wireless Access Point/Bridge/Client's top panel.

**NOTE** Input Terminal Block is suitable for wire size range of 12-28 AWG (3.31-0.0804 mm<sup>2</sup>) and a torque value of 4.5 lb-in (0.51 Nm).



## ATTENTION

If the Wireless Access Point/Bridge/Client is connected to a motor or other similar type of equipment, be sure to use power isolation protection before connecting the Wireless Access Point/Bridge/Client to the DC power inputs, make sure the DC power source voltage is stable.

## Wiring the Relay Contact

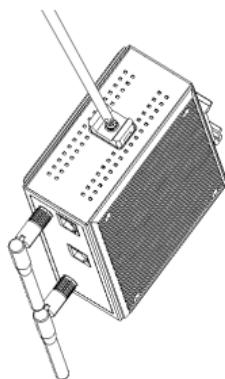
The Wireless Access Point/Bridge/Client has one relay output, which consists of the two contacts of the terminal block on the device's top panel. Refer to the previous section for detailed instructions on how to connect the wires to the terminal block connector, and how to attach the terminal block connector to the terminal block receptor. These relay contacts are used to indicate user-configured events. The two wires attached to the Relay contacts form an open circuit when a user-configured event is triggered. If a user-configured event does not occur, the Relay circuit will be closed.

## Wiring the Digital Inputs

The Wireless Access Point/Bridge/Client has two sets of digital inputs - DI1 and DI2. Each DI comprises two contacts of the 10-pin terminal block connector on the device's top panel. Refer to the "Wiring the Redundant Power Inputs" section for detailed instructions on how to connect the wires to the terminal block connector, and how to attach the terminal block connector to the terminal block receptor.

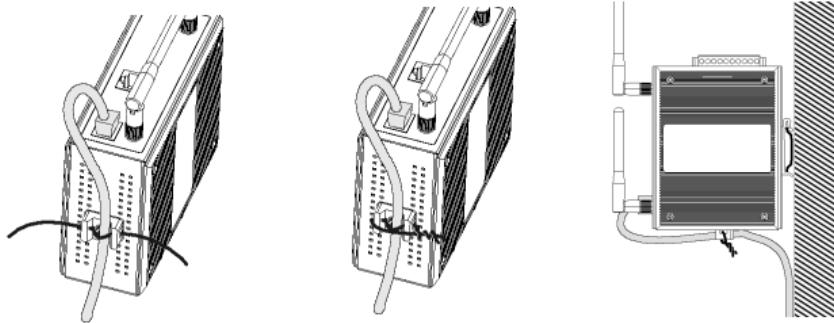
## Cable Holder Installation

Attach the cable holder to the bottom of the Wireless Access Point/Bridge/Client to keep cabling neat and avoid accidents that result from untidy cables.



**STEP 1:** Screw the cable holder onto the bottom of the Wireless Access Point/Bridge/Client.

**STEP 2:** After mounting the Wireless Access Point/Bridge/Client and plugging in the LAN cable, tighten the cable along the device and wall.



# Communication Connections

## 10/100BaseT(X) Ethernet Port Connection

The 10/100BaseT(X) port located on the Wireless Access Point/Client's front panel is used to connect to Ethernet-enabled devices. Below we show pinouts for both MDI (NIC-type) ports and MDI-X (HUB/Switch-type) ports.

MDI Port Pinouts		MDI-X Port Pinouts		8-pin RJ45
Pin	Signal	Pin	Signal	
1	Tx+	1	Rx+	
2	Tx-	2	Rx-	
3	Rx+	3	Tx+	
6	Rx-	6	Tx-	

## 1000BaseT Ethernet Port Connection

1000BaseT data is transmitted on differential TRD +/- signal pairs over copper wires.

MDI /MDI-X Port Pinouts		8-pin RJ45
Pin	Signal	
1	TRD(0)+	
2	TRD(0)-	
3	TRD(1)+	
4	TRD(2)+	
5	TRD(2)-	
6	TRD(1)-	
7	TRD(3)+	
8	TRD(3)-	

## RS-232 Connection

The Wireless Access Point/Client has one RS-232 (8-pin RJ45) console port located on the top panel. Use either an RJ45-to-DB9 or RJ45-to-DB25 cable to connect the Wireless Access Point/Client's console port to your PC's COM port. You may then use a console terminal program to access the Wireless Access Point/Client for console configuration.

Console Pinout		8-pin RJ-45
Pin	Signal	
1	DSR	
2	RTS	
3	GND	
4	TxD	
5	RxD	
6	DCD	
7	CTS	
8	DTR	

## LED Indicators

The front panel of the Wireless Access Point/Bridge/Client contains several LED indicators. The function of each LED is described in the table below.

LED	Color	State	Description
PWR1	Green	On	Power is being supplied to power input PWR1.
		Off	Power is not being supplied to power input PWR1.
PWR2	Green	On	Power is being supplied to power input PWR2.
		Off	Power is not being supplied to power input PWR2.
PoE	Amber	On	Power is being supplied via PoE.
		Off	Power is not being supplied via PoE.
FAULT	Red	On	System is booting up, or a system configuration error or relay event has occurred.
		Blinking (0.5-second intervals)	Cannot get an IP address from the DHCP server.
		Blinking (at 1-second intervals)	IP address conflict.
		Off	Error condition does not exist.
STATE	Green	On	System startup is complete and the system is in operation.
		Blinking (0.5-second intervals)	AeroLink Protection is enabled and is currently in "Backup" state.
		Blinking (at 1-second intervals)	The Wireless Access Point/Bridge/Client has been located by the Weidmueller "WLAN Administration Tool".
	Red	On	Booting error condition. LED stays red in case of a boot error else it becomes green after successful boot process (~35 secs)
SIGNAL (5 LEDs)	Green	On	Wi-Fi Signal strength indicator (for client/slave; client-router modes only).
		Off	
WLAN	Green	On	The device is working in client / slave / client-router mode and has established a link with a WLAN Access Point.
		Blinking	WLAN data communication is running in client/slave/client-router mode.
		Off	The device is not in client / slave / client-router mode or has not established a link with an Access Point.
	Amber	On	The device is working in Access Point or master mode.
		Blinking	WLAN data communication is running in Access Point or master mode.
		Off	The device is not in use or not working in Access Point mode.

LAN	Green	On	LAN port's 1000 Mbps link is active.
		Blinking	Data is being transmitted at 1000 Mbps
		Off	LAN port's 1000 Mbps link is inactive.
	Amber	On	LAN port's 10/100 Mbps link is active.
		Blinking	Data transmission rate 10/100 Mbps.
		Off	LAN port's 10/100 Mbps link is inactive.

## Specifications

WLAN Interface	
Standards	IEEE 802.11a/b/g/n for Wireless LAN IEEE 802.11i for Wireless Security IEEE 802.3 for 10BaseT IEEE 802.3u for 100BaseT(X) IEEE 802.3ab for 1000BaseT IEEE 802.3af for Power-over-Ethernet IEEE 802.1D for Spanning Tree Protocol IEEE 802.1w for Rapid STP IEEE 802.1Q VLAN
Spread Spectrum and Modulation (typical)	<ul style="list-style-type: none"> <li>• DSSS with DBPSK, DQPSK, CCK</li> <li>• OFDM with BPSK, QPSK, 16QAM, 64QAM</li> <li>• 802.11b: CCK @ 11/5.5 Mbps, DQPSK @ 2 Mbps, DBPSK @ 1 Mbps</li> <li>• 802.11a/g: 64QAM @ 54/48 Mbps, 16QAM @ 36/24 Mbps, QPSK @ 18/12 Mbps, BPSK @ 9/6 Mbps</li> <li>• 802.11n: 64QAM @ 300 Mbps to BPSK @ 6.5 Mbps (multiple rates supported)</li> </ul>
Operating Channels (central frequency)	<p>US version:</p> <ul style="list-style-type: none"> <li>• 2.412 to 2.462 GHz (11 channels)</li> <li>• 5.180 to 5.240 GHz (4 channels)</li> <li>• 5.260 to 5.320 GHz (4 channels) *</li> <li>• 5.500 to 5.700 GHz (8 channels, excluding 5.600 to 5.640 GHz) *</li> <li>• 5.745 to 5.825 GHz (5 channels)</li> </ul> <p>EU version:</p> <ul style="list-style-type: none"> <li>• 2.412 to 2.472 GHz (13 channels)</li> <li>• 5.180 to 5.240 GHz (4 channels)</li> <li>• 5.260 to 5.320 GHz (4 channels) *</li> <li>• 5.500 to 5.700 GHz (11 channels) *</li> </ul>
<p><b>*DFS (Dynamic Frequency Selection) channel support: In AP mode, when a radar signal is detected, the device will automatically switch to another channel. However according to regulations, after switching channels, a 60-second availability check period is required before starting the service.</b></p>	
Security	<ul style="list-style-type: none"> <li>• SSID broadcast enable/disable</li> <li>• Firewall for MAC/IP/Protocol/Port-based filtering</li> <li>• 64-bit and 128-bit WEP encryption</li> <li>• WPA/WPA2-Personal and Enterprise (IEEE 802.1X/RADIUS, TKIP and AES)</li> </ul>
Transmission Rates	<ul style="list-style-type: none"> <li>• 802.11b: 1, 2, 5.5, 11 Mbps</li> <li>• 802.11a/g: 6, 9, 12, 18, 24, 36, 48, 54 Mbps</li> <li>• 802.11n: 6.5 to 300 Mbps (multiple rates supported)</li> </ul>

Transmitter Power	<p>802.11b:</p> <ul style="list-style-type: none"> <li>• Typ. <math>26 \pm 1.5</math> dBm @ 1 Mbps</li> <li>• Typ. <math>26 \pm 1.5</math> dBm @ 2 Mbps</li> <li>• Typ. <math>26 \pm 1.5</math> dBm @ 5.5 Mbps</li> <li>• Typ. <math>25 \pm 1.5</math> dBm @ 11 Mbps</li> </ul> <p>802.11g:</p> <ul style="list-style-type: none"> <li>• Typ. <math>23 \pm 1.5</math> dBm @ 6 to 24 Mbps</li> <li>• Typ. <math>22 \pm 1.5</math> dBm @ 36 Mbps</li> <li>• Typ. <math>20 \pm 1.5</math> dBm @ 48 Mbps</li> <li>• Typ. <math>19 \pm 1.5</math> dBm @ 54 Mbps</li> </ul> <p>802.11n (2.4 GHz):</p> <ul style="list-style-type: none"> <li>• Typ. <math>23 \pm 1.5</math> dBm @ MCS0/8 20 MHz,</li> <li>• Typ. <math>18 \pm 1.5</math> dBm @ MCS7/15 20 MHz</li> <li>• Typ. <math>23 \pm 1.5</math> dBm @ MCS0/8 40 MHz,</li> <li>• Typ. <math>17 \pm 1.5</math> dBm @ MCS7/15 40 MHz</li> </ul> <p>802.11a:</p> <ul style="list-style-type: none"> <li>• Typ. <math>23 \pm 1.5</math> dBm @ 6 to 24 Mbps</li> <li>• Typ. <math>21 \pm 1.5</math> dBm @ 36 Mbps</li> <li>• Typ. <math>20 \pm 1.5</math> dBm @ 48 Mbps</li> <li>• Typ. <math>18 \pm 1.5</math> dBm @ 54 Mbps</li> </ul> <p>802.11n (5 GHz):</p> <ul style="list-style-type: none"> <li>• Typ. <math>23 \pm 1.5</math> dBm @ MCS0/8 20 MHz,</li> <li>• Typ. <math>18 \pm 1.5</math> dBm @ MCS7/15 20 MHz</li> <li>• Typ. <math>23 \pm 1.5</math> dBm @ MCS0/8 40 MHz,</li> <li>• Typ. <math>18 \pm 1.5</math> dBm @ MCS7/15 40 MHz</li> </ul>
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**Note:** Based on regional regulations, the maximum transmission power allowed on the UNII bands is restricted in the firmware, as indicated below:

	US version	EU version
2.4 GHz	26 dBm	18 dBm
5 GHz (UNII-1)	23 dBm	21 dBm
5 GHz (UNII-2)	23 dBm	21 dBm
5 GHz (UNII-2e)	23 dBm	23 dBm
5 GHz (UNII-3)	23 dBm	-

Receiver Sensitivity	<ul style="list-style-type: none"> <li>• 802.11b: -93 dBm @ 1 Mbps, -93 dBm @ 2 Mbps -93 dBm @ 5.5 Mbps, -88 dBm @ 11 Mbps</li> <li>• 802.11g: -88 dBm @ 6 Mbps, -86 dBm @ 9 Mbps -85 dBm @ 12 Mbps, -85 dBm @ 18 Mbps -85 dBm @ 24 Mbps, -82 dBm @ 36 Mbps -78 dBm @ 48 Mbps, -74 dBm @ 54 Mbps</li> <li>• 802.11n (2.4 GHz): -70 dBm @ MCS7 20 MHz, -69 dBm @ MCS15 20 MHz, -67 dBm @ MCS7 40 MHz, -67 dBm @ MCS15 40 MHz</li> </ul>
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	<ul style="list-style-type: none"> <li>• 802.11a: -90 dBm @ 6 Mbps, -88 dBm @ 9 Mbps -88 dBm @ 12 Mbps, -85 dBm @ 18 Mbps -81 dBm @ 24 Mbps, -78 dBm @ 36 Mbps -74 dBm @ 48 Mbps, -72 dBm @ 54 Mbps</li> <li>• 802.11n (5 GHz): -69 dBm @ MCS7 20 MHz, -71 dBm @ MCS15 20 MHz, -63 dBm @ MCS7 40 MHz, -68 dBm @ MCS15 40 MHz</li> </ul>
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<b>Protocol Support</b>	
General Protocols	Proxy ARP, DNS, HTTP, HTTPS, IP, ICMP, SNTP, TCP, UDP, RADIUS, SNMP, DHCP, LLDP, VLAN, STP/RSTP
<b>Interface</b>	
Default Antennas	2x dual-band omni-directional antennas, 2 dBi, RP-SMA (male)
Connector for External Antennas	2x RP-SMA (female)
LAN Port	1x RJ 45, 10/100/1000BaseT(X) auto negotiation speed, F/H duplex mode and auto MDI/MDI-X connection
Console Port	1x RS-232 (RJ45-type)
Reset button	Present at rear panel of device
LED Indicators	PWR1, PWR2, PoE, FAULT, STATE, SIGNAL*, WLAN, LAN *signal strength indicator
Alarm Contact (digital output)	1 relay output with current carrying capacity of 1 A @ 24 VDC
Digital Inputs	2 electrically isolated inputs • +13 to +30 V for state "1" • +3 to -30 V for state "0" Max. input current: 8 mA
<b>Physical Characteristics</b>	
Housing	IP30 protection, metal case
Weight	860 g
Dimensions (WxHxD)	52.7 x 135 x 105 mm (2.08 x 5.32 x 4.13 in)
Installation	DIN-rail, Wall mounting (with optional kit)
<b>Environmental Limits</b>	
Operating Temperature	-25 to 60°C (-13 to 140°F) -40 to 75°C (-40 to 167°F) for -T models
Storage Temperature	-40 to 85°C (-40 to 185°F)
Ambient Relative Humidity	5 to 95% (non-condensing)
<b>Power Requirements</b>	
Input Voltage	24 VDC (12 to 48 VDC), 2 redundant inputs or 48 VDC Power-over-Ethernet (IEEE802.3af complaint)
Input Current	0.6 A @ 12 VDC; 0.15 A @ 48 VDC
Connection	One removable 10-pin terminal block, 500 V insulation
Power Consumption	7.2 W
Reverse Polarity Protection	Present

<b>Standards and Certifications</b>	
Safety	UL 60950-1, EN 60950-1
EMC	EN 61000-6-2 / 61000-6-4
EMI	CISPR 32, FCC Part 15B Class B
EMS	IEC 61000-4-2 ESD: Contact 8 kV; Air 15 kV IEC 61000-4-3 RS: 80 MHz to 1 GHz; 10 V/m IEC 61000-4-4 EFT: Power 2 kV; Signal 1 kV IEC 61000-4-5 Surge: Power 2 kV; Signal 1 kV IEC 61000-4-6 CS: 10 V IEC 61000-4-8
Radio	EN 301 489-1/17, EN 300 328, EN 301 893, TELEC, FCC ID: SLE-WAPN008
Hazardous Location	UL/cUL Class I Division 2, ATEX Zone 2, EN 60079-0:2012+A11:2013/IEC 60079-0:2011 Ed.6 EN 60079-15:2010/IEC 60079-15:2010 Ed.4
<b>MTBF</b>	
Time	570,854 hrs.
Database	Telcordia SR332
<b>Warranty</b>	
Time Period	5 years

ATEX

Information:



DEMKO

18 ATEX 2045X

Ex nA IIC T4 Gc

Ambient Range:

-40°C ≤ Tamb ≤ 75°C

WARNING-DO NOT SEPARATE

WHEN ENERGIZED

Rated Cable Temp. ≥ 90.1°C



### ATTENTION

The Weidmüller WLAN device is **NOT** a portable mobile device and should be located at least 20 cm away from the human body. The Weidmüller WLAN device is **NOT** designed for the general public. A well-trained technician is required to deploy the device units and safely establish a wireless network.



### ATTENTION

This device complies with Part 15 of the FCC rules.

Operation is subject to the following conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received,

including interference that may cause undesired operation.

## **ATTENTION**

 Do not locate the antenna near overhead power lines or other electric light or power circuits, or where it can come into contact with such circuits. When installing the antenna, take extreme care not to come into contact with such circuits, because they may cause serious injury or death. For proper installation and grounding of the antenna, refer to national and local codes (for example, U.S.: NFPA 70; National Electrical Code, Article 810; Canada: Canadian Electrical Code, Section 54).

**NOTE** For installation flexibility, either the A antenna (on the front panel) or the B antenna (on the top panel) may be selected for using. Make sure the antenna connection matches the antenna configured in the Weidmüller WLAN device web interface.

To protect the connectors and RF module, all radio ports should be terminated by either an antenna or a terminator. We strongly recommend using resistive terminators for terminating the unused antenna ports.

## **ATTENTION**

 "Publication Number: 443999 Rule Parts: 15E". FCC. October 5, 2009. "Devices must be professionally installed when operating in the 5470–5725 MHz band".

## **ATTENTION**

 The equipment shall be installed in an enclosure that provides a degree of protection not less than IP 54 and accessible only by use of a tool in accordance with IEC 60079-15.

Subject devices are for use in an area of not more than pollution degree 2 in accordance with IEC 60664-1. .

When the WLAN device is installed in an enclosure, the antennas must remain internal to the enclosure and not external. External antenna deployment is allowed only if the antennas are certified by C1D2, ATEX Zone 2 or IECEx.

The Weidmüller WLAN devices are open-type devices that are provided with a tool-removable cover or door that make these devices suitable for installation inside an enclosed environment.

This equipment is suitable for use only in Class I, Division 2, Groups A, B, C, and D or non-hazardous locations.

## **WARNING**

### **EXPLOSION HAZARD**

 Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous.



## WARNING

### EXPLOSION HAZARD

Substitution of any components may impair suitability for Class I, Division 2.



## WARNING

- This equipment is intended to be used in a Restricted Access Location, such as a dedicated computer room where only authorized service personnel or users can gain access. Such personnel must be instructed about the fact that the metal chassis of the equipment is extremely hot and may cause burns.
- Service personnel or users have to pay special attention and take special precautions before handling this equipment.
- Only authorized, well-trained professionals should be allowed to access the restricted access location. Access should be controlled by the authority responsible for the location with lock and key or a security identity system.
- **External metal parts are hot!!** Pay special attention or use special protection before handling the equipment.

Weidmüller gives a 5-year warranty on this product in accordance with the warranty terms as described in the general conditions of sale of the Weidmüller company which has sold the products to you. Weidmüller warrants to you that such products the defects of which have already existed at the time when the risk passed will be repaired by Weidmüller free of charge or that Weidmüller will provide a new, functionally equivalent product to replace the defective one. Safe where expressly described otherwise in writing in this catalogue/product description, Weidmüller gives no warranty or guarantee as to the interoperability in specific systems or as to the fitness for any particular purpose. To the extent permitted by law, any claims for damages and reimbursement of expenses, based on whatever legal reason, including contract or tort, shall be excluded. Where not expressly stated otherwise in this warranty, the general conditions of purchase and the expressive liability commitments therein of the respective Weidmüller company which has sold the products to you shall be applicable.

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