

## Anybus® WLAN Access Point IP30

### STARTUP GUIDE

SP2382 1.3 en-US ENGLISH



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# Important User Information

## Disclaimer

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# 1 About This Document

This document describes how to install Anybus WLAN Access Point IP30.

For additional documentation and software downloads, FAQs, troubleshooting guides and technical support, please visit [www.anybus.com/support](http://www.anybus.com/support).

## 1.1 Document Conventions

The following conventions are used to indicate safety information and other important content in this document:



### **WARNING**

Instruction that must be followed to avoid a risk of death or serious injury.



### **Caution**

Instruction that must be followed to avoid a risk of personal injury.



Instruction that must be followed to avoid a risk of reduced functionality and/or damage to the equipment, or to avoid a network security risk.



*Additional information which may facilitate installation and/or operation.*

## 2 Safety

### 2.1 General Safety Instructions

**Caution**

This equipment emits RF energy in the ISM (Industrial, Scientific, Medical) band. Make sure that all medical devices used in proximity to this device meet appropriate susceptibility specifications for this type of RF energy.

**Caution**

Hot surfaces. Use a dry cloth for cleaning.

**Caution**

Risk of overheating. Do not block the air ventilation openings.



The equipment is of open type and must be installed in a suitable enclosure. Ambient temperature must not exceed 70 °C.



This product contains parts that can be damaged by electrostatic discharge (ESD). Use ESD prevention measures to avoid damage.

### 2.2 Intended Use

The intended use of this equipment is as a communication interface and gateway. The equipment receives and transmits data on various physical levels and connection types.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## 2.3 5 GHz Transmission Power Restriction (EU only)



Transmission power must be reduced for 5 GHz channels 149-165 when the unit is used in the EU.

To comply with the European Radio Equipment Directive (RED) the effective radiated power output for 5 GHz channels 149-165 (U-NII-3) must not exceed 25 mW (~14 dBm) when the unit is used in the EU.

To configure the unit for use within the EU, set **Tx Power** to **14 dBm** or less on the **Wireless 1 Options** page of the web configuration interface.

Wireless Settings --> Wireless Options

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**Wireless performance tuning**

Radio:	<input type="button" value="Enabled"/> <input type="button" value="Disabled"/>
Beacon Interval:	<input type="text" value="100"/>
DTIM Interval:	<input type="text" value="1"/>
Fragmentation Threshold:	<input type="text" value="2346"/>
RTS Threshold:	<input type="text" value="2347"/>
<b>Tx Power:</b>	<b>14 dBm ▼</b>
Wireless Mode:	<input type="radio"/> 2.4G <input checked="" type="radio"/> 5G

Fig. 1 Wireless Settings

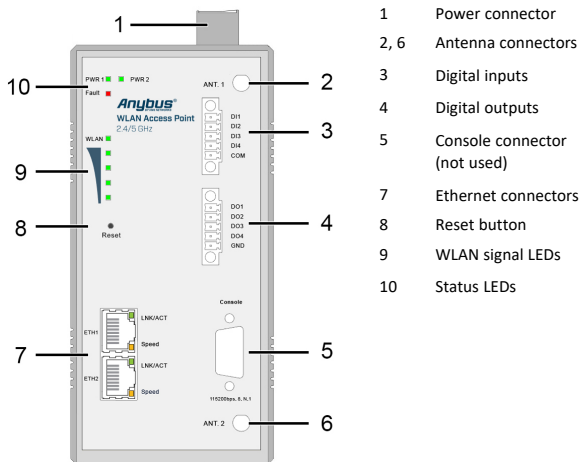
## 3 Installation

The Anybus WLAN Access Point IP30 can be mounted on a standard DIN rail or screw-mounted directly onto a flat surface using the included wall mounting kit.

For optimal reception, wireless devices require a zone between them clear of objects that could otherwise obstruct or reflect the signal. A minimum distance of 50 cm between the devices should also be observed to avoid interference.

Make sure that you have all the necessary information about the capabilities and restrictions of your local network environment before installation.

### 3.1 Overview





## 3.2 Connectors

### 3.2.1 Power Connector

The power connector consists of a 6-pin terminal block located on the top of the unit. The unit can be supplied with power from two independent 12–48 VDC power sources for redundancy using the inputs **PWR-1** and **PWR-2**.

The power connector also includes a relay output, **Fault**, that can be used for triggering an alarm in case of power failure (see the User Manual).

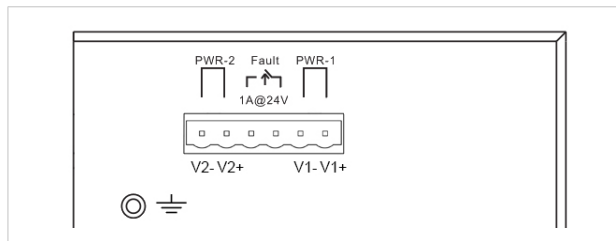



Fig. 2 Top view



Connecting power with reverse polarity or using the wrong type of power supply may damage the equipment. Make sure that the power supply is connected correctly and of the recommended type.

See also [Technical Data, p. 11](#) regarding power supply requirements.

<b>V1+</b>	Power Input 1 +
<b>V1-</b>	Power Input 1 -
<b>V2+</b>	Power Input 2 +
<b>V2-</b>	Power Input 2 -
<b>Fault</b>	Relay output, NO, max 1 A @ 24 V
	Chassis ground

#### Additional Installation Instructions

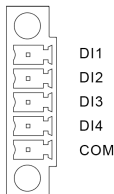
- Field wiring terminals — use only 105 °C copper (Cu) 12–28 AWG
- Terminal tightening torque: 4.5 lb-in (0.5 Nm)

### 3.2.2 Digital In/Out Connectors

Anybus WLAN Access Point IP30 has 4 digital inputs and 4 digital outputs that can be used for monitoring and controlling purposes. See the description of the DIDO settings in the User Manual for more information.

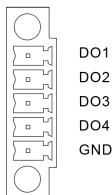
#### Digital Inputs

Pin	Function
DI1	Direct input 1
DI2	Direct input 2
DI3	Direct input 3
DI4	Direct input 4
COM	Common signal ground



#### Digital Outputs

Pin	Function
DO1	Direct output 1
DO2	Direct output 2
DO3	Direct output 3
DO4	Direct output 4
GND	Common signal ground



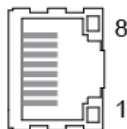
#### Additional Installation Instructions

- Field wiring terminals — use only 105 °C copper (Cu) 12–28 AWG
- Terminal tightening torque: 4.5 lb-in (0.5 Nm)

### 3.2.3 Ethernet Connectors

Anybus WLAN Access Point IP30 has two switched Ethernet ports with RJ45 type connectors that are labeled **ETH1** and **ETH2**.

Pin	Function
1	TD+
2	TD-
3	RD+
4, 5, 7, 8	(reserved)
6	RD-



### 3.3 LED Indicators

<b>PWR1</b>	Green	Power input 1
<b>PWR2</b>	Green	Power input 2
<b>FAULT</b>	Red	General error
<b>WLAN</b>	Off	No WLAN link
	Green	WLAN link established
	Green, flashing	WLAN traffic

4 LEDs	Strong WLAN signal
2–3 LEDs	Adequate WLAN signal
1 LED	Weak WLAN signal
All unlit	No WLAN signal



#### ETH1/ETH2 LEDs

<b>LNK/ACT</b>	Off	No link
	Green	Link established
	Green, flashing	Ethernet traffic
<b>Speed</b>	Off	No traffic
	Orange	10/1000 Mbit/s
	Green	100 Mbit/s



## 4 Configuration

Anybus WLAN Access Point IP30 is configured via a web interface which is accessed by pointing a web browser to the IP address of the unit. The computer accessing the web interface must be in the same IP subnet as the access point.

### Default web interface settings

IP address	192.168.0.2
User ID	admin
Password	admin

### 4.1 Factory Reset

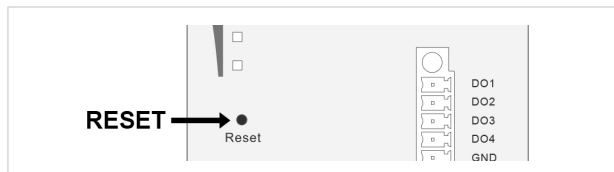


Fig. 3 Reset button

To restore the factory default settings, press and hold **RESET** on the front panel until the power LED indicator(s) starts to flash, then release the button.

## 5 Technical Data

### 5.1 Technical Specifications

<b>Order code</b>	<b>AWB4001</b>
<b>Wireless antenna</b>	External (RP SMA)
<b>Wired interface</b>	Ethernet
<b>Ethernet port</b>	2 x 10/100/1000Base-T(X) Auto MDI/MDX RJ45 connectors
<b>Digital inputs</b>	Max. 30 VDC / 10 mA
<b>Digital outputs</b>	5–30 VDC, max. 30 mA
<b>Power connector</b>	Dual power inputs on 6-pin terminal block
<b>Power supply</b>	2 x 12–48 VDC, reverse polarity protection
<b>Power consumption</b>	7.5 W
<b>Dimensions (WxHxD)</b>	74.3 x 153.6 x 109.2 mm
<b>Weight</b>	1.11 kg
<b>Operating temperature</b>	-25 to +70 °C
<b>Storage temperature</b>	-40 to +85 °C
<b>Humidity</b>	5 % to 95 % non-condensing
<b>Operating altitude</b>	Up to 2000 m
<b>Mounting</b>	DIN rail or wall mount
<b>Housing</b>	Metal
<b>Protection class</b>	IP30
<b>Certifications</b>	See datasheet

For more technical details and specifications, visit [www.anybus.com/support](http://www.anybus.com/support).

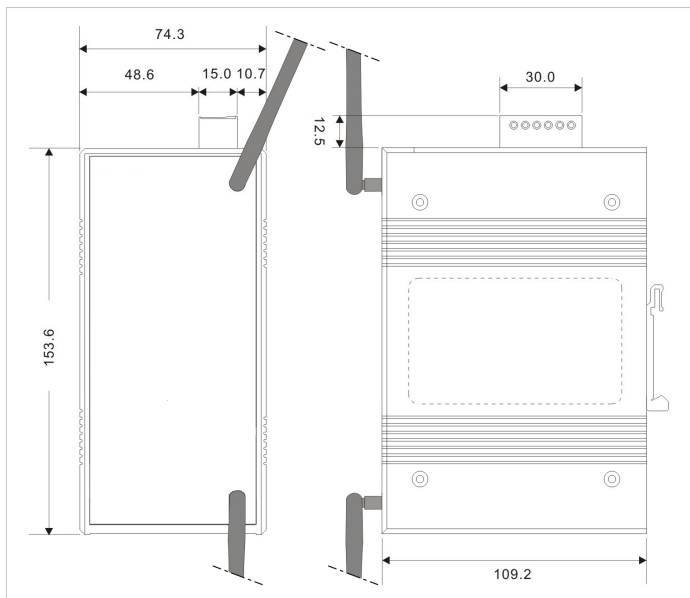
#### Disposal and recycling



You must dispose of this product properly according to local laws and regulations. Because this product contains electronic components, it must be disposed of separately from household waste. When this product reaches its end of life, contact local authorities to learn about disposal and recycling options, or simply drop it off at your local HMS office or return it to HMS.

For more information, see [www.hms-networks.com](http://www.hms-networks.com).

## 5.2 Dimensions



**Fig. 4** Dimensions

All measurements are in mm.

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