



ENGLISH

Safety and Compliance Information

General Safety Instructions

Caution

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

Warning

This equipment is recommended for use in both domestic and industrial environments. For industrial environments it is mandatory to use a filter network to comply with immunity requirements. For domestic environments the equipment must be used if a filter network is not supplied by the manufacturer.

Attention

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

Intended Use

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

Type Identification

The type name consists of a type prefix followed by two designators for interface configuration and functionality.

Prefix AWB2 Anybus Wireless Bolt

Interface configuration A Ethernet

Functionality A Ethernet B Ethernet and RS232/485 C Ethernet and CAN

Example: AWB2AA = Anybus Wireless Bolt with 16-pin plug connector and Ethernet networking only.

Installation

Before installing the unit you have to know the necessary information about the capabilities and restrictions of your local network environment before installation. This equipment is intended to be mounted on or a machine or chassis through an M5 (3.2 mm) hole using the included sealing ring and nut. The mounting torque is 5 Nm. Make sure the sealing is made with a flat seal instead of a dome seal and is free from oil and greases.

Tightening torque: 5 Nm

Make sure that the sealing ring is correctly placed in the circular groove in the top part of the housing before tightening the nut.

Always hold the BOTTOM part of the unit when unscrewing the nut, not the top (the cap).

AWB2AA, AWB2AB, AWB2AC If using a shielded Ethernet cable the shield must be connected to the power connector not using PoE.

Technical Specifications

Type identification AWB2AA, AWB2AB, AWB2AC

Communication connector Included plug connector RJ45

Power connector Included plug connector 3-hole screw connector

Power supply 9–30 VDC (5%–20%) 19–36 VDC

Overvoltage protection

Power over Ethernet 44–57 VDC DTE Type 1 according to IEEE 802.3af

Power consumption 0.7 W max, 1.7 W max

Antenna Internal dual-band 2.4 GHz and 5 GHz antenna

Wireless LAN 2.4 GHz Access Point, 11-13-13 depending on regulatory domain scan

2.4 GHz (EU) 2.4 GHz (US) 2.4 GHz (CA) 2.4 GHz (AU) 2.4 GHz (JP) 2.4 GHz (KR) 2.4 GHz (CN) 2.4 GHz (BR) 2.4 GHz (IN) 2.4 GHz (SE) 2.4 GHz (DE) 2.4 GHz (AT) 2.4 GHz (NL) 2.4 GHz (IE) 2.4 GHz (PT) 2.4 GHz (ES) 2.4 GHz (MX) 2.4 GHz (AR) 2.4 GHz (CL) 2.4 GHz (AR) 2.4 GHz (PR) 2.4 GHz (DO) 2.4 GHz (CR) 2.4 GHz (VE) 2.4 GHz (PE) 2.4 GHz (PH) 2.4 GHz (ID) 2.4 GHz (PHL) 2.4 GHz (PHL)

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RF output power: 13.7 dBm

Bluetooth RF output power: 9.75 dBm

Bluetooth LE RF output power: 5.75 dBm

Storage temperature -40 to +85 °C

Operating temperature (dirt sunlight) -40 to +85 °C

Operating temperature (dirt sunlight) -40 to +85 °C (black top)

Humidity EN 60068-2-27: Damp heat, 40°C, 93% humidity for 4 days.

Vibration See datasheet

Housing material Plastic (PC/ABS) certified for detaches

Protection class IP20 (Inlet of dust), P07 / UL NEMA 4X

Mounting M5 screw and nut (0.5 mm hole diameter)

Additional technical data and information related to the installation and use of this product can be found at www.anybus.com/support

CE Compliance

This product is in compliance with the Radio Equipment Directive 2014/53/EU and the RoHS Directive 2011/65/EU with the exception of PoE modules with specific exemptions. The full text of the Declaration of Conformity is available at www.anybus.com/support

Disposal and recycling

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

For more information, see www.anybus.com/recycle

ATEX

This equipment is certified for use in potentially explosive atmospheres in compliance with the following standards: EN 60079-0, 2018, EN 60079-10, 2010

The certification number of the certified equipment according to the ATEX directive 2014/30/EU is: DEMKO 18 ATEX 1806X

According to the standard listed above, this equipment is certified with the following marking:

(Ex II 3 G ATEX 1806X)

The UL mark for Exd IIC and HacD are merged into one, when only the certification number for HacD are required.

The certification number for the Anybus Wireless Bolt modules are certified for electrical equipment to be used in the following hazardous locations:

- Class I, Division 2 - Area where ignitable concentrations of flammable gases, vapors or liquids are NOT likely to exist under normal operating conditions.

- Group B: Flammable gas, flammable liquid/liquefied vapor or combustible liquid/liquefied vapor mixed with air that may or may not explode, having a lower explosive limit (LEL) less than or equal to 10% and an upper explosive limit (UEL) greater than or equal to 50%.

- Group C: Flammable gas, flammable liquid/liquefied vapor or combustible liquid/liquefied vapor mixed with air that may or may not explode, having a lower explosive limit (LEL) less than or equal to 10% and an upper explosive limit (UEL) greater than or equal to 50%.

- Temperature class: Surface temperature will not reach more than 135 °C (80% of the auto-ignition temperature for the vapors/liquids for which the equipment is certified)

Special Conditions of Use

The equipment can only be used in an area of at least pollution degree 2, as defined in IEC 60664-1.

The equipment shall be installed in an enclosure that provides a minimum ingress protection of IP65 in accordance with EN 60079-15.

Transient protection shall be provided that is set at a level not exceeding 140 % of the peak rated voltage value at the supply terminals to the equipment.

WARNING

EXPLOSION HAZARD - Do not use the equipment in any environment where there is a risk of explosion.

When installing the equipment, turn off power before replacing or wiring modules.

Do not disconnect equipment while the circuit is live or when the area is known to be free of ignitable concentrations.

Install in an enclosure considered representative of the intended use. To comply with ATEX directives, the equipment must be mounted in an IP24 case.

In an IP24 case.

ATEX

The equipment is certified for use in potentially explosive atmospheres in compliance with the following standards:

EN 60079-0, 2018, EN 60079-10, 2010

EN 60079-15, 2018

EN 60079-20, 2018

EN 60079-21, 2011

EN 60079-31, 2011

EN 60079-32, 2011

EN 60079-34, 2011

EN 60079-35, 2011

EN 60079-36, 2011

EN 60079-37, 2011

EN 60079-38, 2011

EN 60079-39, 2011

EN 60079-40, 2011

EN 60079-41, 2011

EN 60079-42, 2011

EN 60079-43, 2011

EN 60079-44, 2011

EN 60079-45, 2011

EN 60079-46, 2011

EN 60079-47, 2011

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EN 60079-90, 2011

EN 60079-91, 2011

EN 60079-92, 2011

EN 60079-93, 2011

EN 60079-94, 2011

EN 60079-95, 2011

EN 60079-96, 2011

EN 60079-97, 2011

Konformita

Questo prodotto è conforme alla Direttiva sulle apparecchiature radio 2014/53/EU e alla direttiva RoHS 2011/65/EU e alle norme di conformità della direttiva delegata 2013/50/UE. La Dichiarazione di Conformità è disponibile nella pagina www.anybus.com/support.

Smaltimento e riciclo

Questo prodotto deve essere smesso in conformità alle leggi e alle normative locali. Questo prodotto contiene componenti elettronici, pertanto deve essere smesso separatamente da altri rifiuti domestici. Al termine di ciclo di vita del prodotto, contattare la società locale per ricevere le spese di smaltimento e riciclo, secondo le norme HgD o recarsi a HgD.

ATEX

Anybus Wireless Bolt è stato certificato per uso in atmosfere potenzialmente esplosive in conformità ai seguenti standard:

EN IEC 60079-0: 2018, EN 60079-1: 2018

I numero e certificazione del modulo Anybus Wireless Bolt certificato secondo la direttiva ATEX 2014/34/EU è:

Dichiarazione di uso specifico:

• L'apparecchiatura deve essere utilizzata solo in area con grado di inquinamento minimo 2, conforme alla IEC 60064-1.

• L'apparecchiatura deve essere installata in un luogo adeguato che assicura una protezione minima in ingresso IP 54, conforme alla EN 60079-0: 2018, EN 60079-1: 2018

• Deve essere prevista una protezione strutturale a livello non superiore al 140% di tensione di tempesta di riferimento su tutti i terminali dell'apparecchiatura.

Avvertenze:

• ATENZIONE - PERICOLO DI ESPLOSIONE - EVENTUALI SOSTITUZIONI DI COMPONENTI POSSONO COMPROMETTERE L'IDONEITÀ DELL'APPARECCHIATURA.

• ATENZIONE - PERICOLO DI ESPLOSIONE - NON SCARICA L'ATTREZZATURA CON IL CIRCUITO ALIMENTATO O SE NON SI È CERTI CHE NON VI SONO ESPLOSIVI MATERIALI.

• ATENZIONE - PERICOLO DI ESPLOSIONE - INSTALLARE IN UN ALLOGGIOAMENTO DEDICATO AL PUNTO PRESTO PER LA CONFORMITÀ ALLA DIRETTIVA ATEX, L'APPARECCHIATURA DEVE ESSERE INSTALLATA IN UN ALLOGGIOAMENTO IP54.

Lietuvos K.

Saugos ir atlikties informacija

Bendrosios saugos instrukcijos

Perspėjimas
Ši sranka skleidžia RO (ergia) ISM (pramonė, mokslo, medicinos) dėlųjų įstiklinė, kai vis nosim patraukti, naudoti arba priešais, kai bus užtemta žemėje arba įrota į ūdenį arba spalvą.

Sąmonė
Ši produkto rekomenduojama naudoti tekniškai, bet neleiskianti. Pramoninė aplinkoje būtina naudoti funkciniai įrenginiai, kurie yra išskirtiniu būdu apsaugoti nuo elektros išsivysčiavimo, kurie yra naudoti tada, kai naudomas elektroninis įrenginys.

Naudotinio pasirkirstis
Šių įrenginių naudotinio pasirkirstis yra išskirtinis, nes jame yra gausus ir pernelyg dažnių elementų.

Pranešimai
Šių įrenginių naudotinio pasirkirstis yra išskirtinis, nes jame yra gausus ir pernelyg dažnių elementų.

Tipas identifikavimas
Šių įrenginių tipas yra Anybus Wireless Bolt.

Techninės duomenys
Tipas identifikavimas: AWB2A, AWB2AB, AWB2AC

Kodas savininko konfiguracijos: A Anybus Wireless Bolt

Struktūros saugumas: B Sankintės Rj45 ar 3 terminalų slėtinės ligčiai

Funkcionalumas: C Ethernet, RS232/485

Vykdymas: D Ethernet, CAN

Paveikslėlis: Anybus Wireless Bolt

Techninės spesifikacijos: Anybus Wireless Bolt