

Anybus Communicator CAN - Modbus-TCP INSTALLATION SHEET



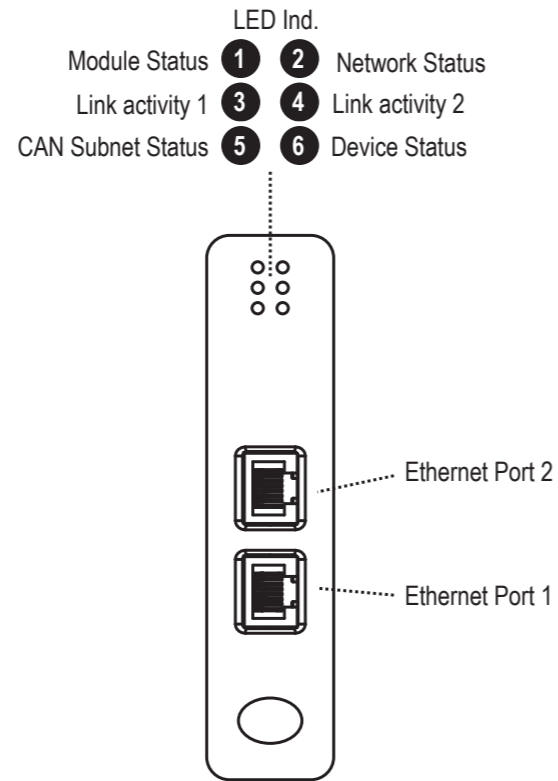
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www.anybus.com

Module Front



LED Indicators

LED no	Indication	Meaning
1 (Module Status)	Off Green Flashing green (1 Hz) Flashing red (1 Hz) Flashing red (2 Hz) Flashing red (4 Hz) Red	No power or not initialized Initialized, normal operation IP address not set by on-board switches Invalid MAC address (internal error) Failed to load Ethernet configuration from FLASH Internal error (fatal) Duplicate IP address detected
2 (Network Status)	Flashing green	Indicates the number of Modbus/TCP connections (each connection is represented by as a single green flash)
3 (Link activity 1) 4 (Link activity 2)	Off Flashing green Flashing yellow	No link sensed on port 1/2 Activity, receiving/transmitting Ethernet Packets at 100 Mbps Activity, receiving/transmitting Ethernet Packets at 10 Mbps
5 (CAN Subnet Status)	Off Green Flashing red Red	Power off/no CAN communication Running with no transaction errors/timeout Transaction error/timeout or subnetwork stopped Fatal error
6 (Device Status)	Off Alternating red/green Green Flashing green Red	Power off/initializing Invalid or missing configuration Run Idle Fatal error

Accessories Checklist

The following items are required for installation:

- Anybus Configuration Manager - Communicator CAN (available at www.anybus.com)
- CAN cable (included D-sub can be used)
- USB cable (type B) for configuration download
- LAN cable (not included)

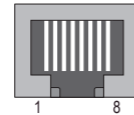
Modbus-TCP Notes:

- Modbus start address for input registers is 1 (data from CAN to Modbus). Modbus start address for holding registers is 1, if Modbus Addressing Mode is enabled, else it is 1025 (data from Modbus to CAN).
- Please refer to the manual for information about how to set the IP address of the module.

Installation and Startup Summary

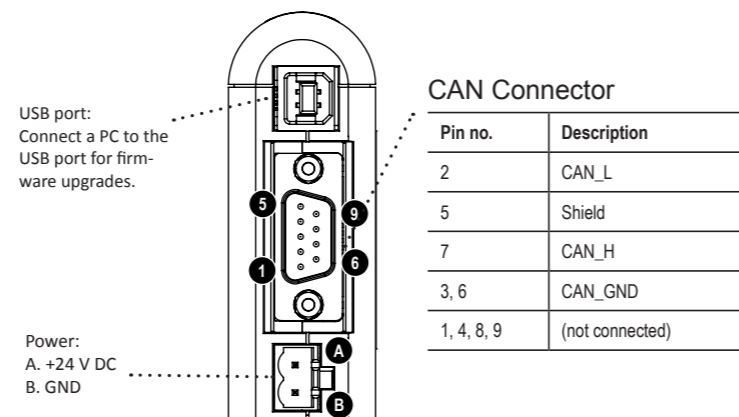
- Build the configuration in the Anybus Configuration Manager.
- Mount the Communicator at its proper position.
- Connect the USB, LAN and CAN cables (if needed, use cables with terminations or add terminations).
- Power up the module and download the configuration.
- Remove the USB cable.

EtherNet Connector



Pin no	Description
1	TD+
2	TD-
3	RD+
6	RD-
4, 5, 7, 8	(reserved)

Bottom View



Technical Details

- Power supply:
24 V DC (-10% to +10%).
- Power consumption:
Maximum power consumption is 250 mA @ 24 V DC.
Typical power consumption: 100 mA @ 24 V DC.
- Protective Earth (PE):
Internal connection to PE via DIN-rail.
Note: Make sure the DIN-rail is properly connected to PE.

Modbus-TCP Support

Technical questions regarding the Modbus-TCP fieldbus system should be addressed to the Modbus IDA Organization.

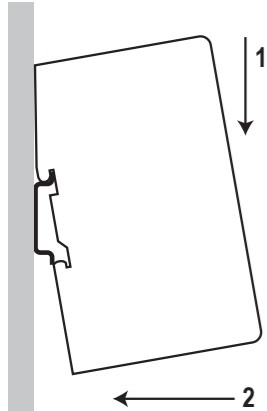
Online: www.modbus-ida.org

For maintenance and support, contact the HMS support department. Contact information is available at the support pages at www.anybus.com.

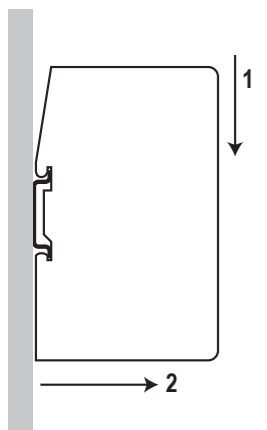
Further information and documents about this product can be found at the product pages on www.anybus.com.

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DIN-rail Mounting



To snap the gateway on, first press it downwards (1) to compress the spring in the DIN-rail mechanism, then push it against the DIN-rail as to make it snap on (2).



To snap the gateway off, push it downwards (1) and pull it out from the DIN-rail (2), as to make it snap off from the DIN-rail.

Additional Installation and Operating Instructions

Supply voltage: The X-gateway requires a regulated 24 V (21.6 V to 26.4 V) DC power source.

Field wiring terminal markings (wire type (Cu only, 14-30AWG)
"Use 60/75 or 75°C copper (CU) wire only"
Terminal tightening torque (5-7 lb-in (0.5 - 0.8 Nm)).

Use in Overvoltage Category I Pollution Degree 2 Environment.

Install in an enclosure considered representative of the intended use. To comply with ATEX directives, the equipment must be installed within an IP54 enclosure and must be installed with a transient suppressor on the supply that does not exceed 140% (33.6 V DC) of the nominal rated supply voltage.

Operating temperature/Surrounding temperature:
-25 to +55 degrees C @ 250 mA @ 24 V DC.

Maximum surface temperature: 135 degrees C.

Pressure: 850 - 1050 millibar.

This product is designed to safely operate in class I, division 2 Hazardous location according to ANSI/ISA 12.12.01-2011 and category 3, zone 2 according to EN 60079-0, EN 60079-11, and EN 60079-15.

SUITABLE FOR USE IN CLASS I, DIVISION 2, GROUPS A, B, C AND D HAZARDOUS LOCATIONS, OR NONHAZARDOUS LOCATIONS ONLY.

Warnings

- **WARNING - EXPLOSION HAZARD - SUBSTITUTION OF ANY COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2.**
- **WARNING - EXPLOSION HAZARD - WHEN IN HAZARDOUS LOCATIONS, TURN OFF POWER BEFORE REPLACING OR WIRING MODULES.**
- **WARNING - EXPLOSION HAZARD - DO NOT DISCONNECT EQUIPMENT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS KNOWN TO BE FREE OF IGNITABLE CONCENTRATIONS.**
- **WARNING - EXPLOSION HAZARD - THE USB CONNECTOR IS NOT FOR USE IN HAZARDOUS LOCATIONS AND FOR TEMPORARY CONNECTION ONLY. DO NOT USE, CONNECT OR DISCONNECT UNLESS THE AREA IS KNOWN TO BE NONHAZARDOUS. CONNECTION OR DISCONNECTION IN AN EXPLOSIVE ATMOSPHERE COULD RESULT IN AN EXPLOSION.**
- **WARNING - INSTALL IN AN ENCLOSURE CONSIDERED REPRESENTATIVE OF THE INTENDED USE. TO COMPLY WITH ATEX DIRECTIVES, THE EQUIPMENT MUST BE INSTALLED WITHIN AN IP54 ENCLOSURE AND MUST BE INSTALLED WITH A TRANSIENT SUPPRESSOR ON THE SUPPLY THAT DOES NOT EXCEED 140% (33.6 V DC) OF THE NOMINAL RATED SUPPLY VOLTAGE.**

UL Certification



LISTED 67AM

Atex Certification

EX nA ic IIC T4 Gc



DEMKO 12 ATEX 1062548X

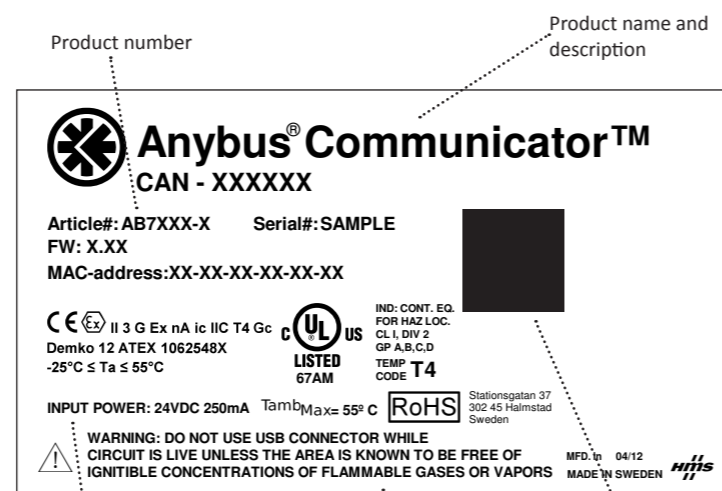
EMC Compliance (CE)



This product is in accordance with the EMC directive 2004/108/EC through conformance with the following standards:

- **EN 61000-6-4 (2007)**
Emission standard for industrial environment
EN 55016-2-3, Class A (2006)
- **EN 61000-6-2 (2005)**
Immunity for industrial environment
EN 61000-4-2 (2009)
EN 61000-4-3 (2006)
EN 61000-4-4 (2004)
EN 61000-4-5 (2005)
EN 61000-4-6 (2007)

Label Markings



Surrounding air temperature and electrical ratings

Warnings

Product information bar code

HMS Industrial Networks AB
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302 45 Halmstad
Sweden



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