

Anybus® X-gateway

J1939 to Modbus Interface


Installation Guide

AB7612

Part no. SP0846

Rev. 1.13

HMS Industrial Networks AB

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Table of Contents


Important Information	2
Installation Items Checklist	3
Connections	4
Power and Network 15-Pin D-Subminiature.....	4
Configuration 25-Pin D-Subminiature.....	4
Configuration Software Installation	5
Further Technical Information.....	5
Technical Specifications.....	6
Environmental Specifications	6
EMC Directive Compliance	6
Electrical Specifications.....	6
Warranty	7
Support	8


Important Information

- Power, input and output (I/O) wiring must be in accordance with Class 1, Division 2 wiring methods - article 501-4 (b) of the National Electric code, NFPA 70 and in accordance with local codes.
- For use in Class 2 circuits only.
- Suitable for Surrounding temperature of 65 C max.
- Use 60/75 C copper wire only.

<p>ATTENTION</p> 	<p>FAIL-SAFE OR CRITICAL OPERATIONS</p> <p>This product is not designed, intended, authorized, or warranted to be suitable for use or resale as control equipment in, or for other applications related to, hazardous or potentially-hazardous environments or applications requiring high-availability or fail-safe performance, such as in the operation of nuclear facilities, aircraft navigation or communications systems, air traffic control, life support, public works, weapons systems, or any other application in which the failure of a product could lead to property damage, death, personal injury, or environmental damage.</p>
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<p>WARNING</p> 	<p>EXPLOSION HAZARD</p> <p>Substitution of components may impair suitability for class 1, Division 2.</p>
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<p>WARNING</p> 	<p>EXPLOSION HAZARD</p> <p>When in hazardous locations turn off power before replacing or wiring modules</p>
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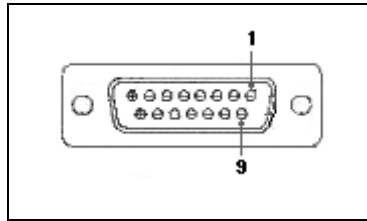
<p>WARNING</p> 	<p>EXPLOSION HAZARD</p> <p>Do not disconnect equipment unless power has been switched off or the area is known to be nonhazardous.</p>
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Installation Items Checklist

- Anybus X-gateway J1939 to Modbus Interface (part number AB7612)
- *Anybus-X Configuration Tool (BWConfig)* downloadable from the HMS Industrial Networks website, www.anybus.com.
- *Anybus X-gateway J1939 to Modbus Interface User Manual* downloadable from the HMS Industrial Networks website, www.anybus.com.
- Fieldbus and power cables connected for connection to supplied 15-pin D-Sub connector.
- Null-modem RS-232 cable for connecting PC to 25-pin D-sub connector for configuration.

Connections

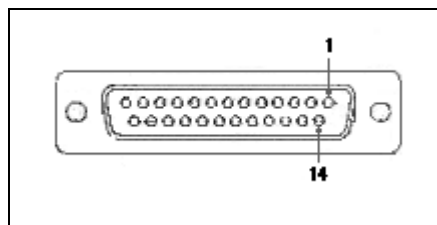
Power and Network 15-Pin D-Subminiature



Pin	Connection	Pin	Connection
1	Not used	9	24 VDC Common
2	Not used	10	24 VDC +
3	Not used	11	Modbus RS-485 A
4	Not used	12	Modbus RS-485 B
5	Not used	13	J1939 CAN Shield
6	Not used	14	J1939 CAN Low
7	Not used	15	J1939 CAN High
8	Not used	---	

Table 2-1 Power and Network Connector Pin Definitions

Configuration 25-Pin D-Subminiature



Pin	Connection	Pin	Connection
1	Shield	14	Not used
2	Transmit Data	15	Not used
3	Receive Data	16	Not used

Table 2-2 Configuration Connection Pin Definitions

Pin	Connection	Pin	Connection
4	Not used	17	Not used
5	Not used	18	Not used
6	Not used	19	Not used
7	Signal Ground	20	Not used
8	Not used	21	Not used
9	Not used	22	Not used
10	Not used	23	Not used
11	Not used	24	Not used
12	Not used	25	Not used
13	Not used	---	

Table 2-2 Configuration Connection Pin Definitions

Configuration Software Installation

The X-gateway Configuration Tool is required to configure the X-gateway. The BWConfig installation is downloadable from the Pyramid Solutions website.

Unzip the installation files, then run the *setup.exe* program. Follow the instructions on the screen during the installation process.

Further Technical Information

Complete technical information on installing and configuring the X-gateway can be found in the *Anybus X-gateway J1939 to Modbus Interface User Manual*. The User Manual can be downloaded from the HMS Industrial Networks website or requested directly at the contact information supplied below.

Technical Specifications

Environmental Specifications

Operating Temperature: 0 to 70 degrees Celsius

Non-Operating Temperature: -25 to 85 degrees Celsius

EMC Directive Compliance

This product is tested to meet the Council Directive 89/336/EC Electromagnetic Compatibility (EMC) by applying the following standards, in whole or in part, documented in a technical construction file:

- EN50081-2-EMC Generic Emission Standard, Part 2 - Industrial Environment
- EN50082-2-EMC Generic Immunity Standard, Part 2 - Industrial Environment

This product is intended for use in an industrial environment.

Electrical Specifications

Power Supply: 12-30 VDC.

Current Requirements: 93-95 mA at 24 VDC.

Warranty

HMS Industrial Networks AB warrants all new products to be free of defects in material and workmanship when applied in the manner for which they were intended and according to HMS Industrial Networks AB' published information on proper installation. The Warranty period is one year from the date of shipment.

HMS Industrial Networks AB will repair or replace, at its option, all products returned to it freight prepaid, which prove upon examination to be within the Warranty definitions and time period.

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