To get access to different Fieldbus systems becomes easier and less expensive for your AS-I System.

AS-Interface Gateways

20 Sep. 05 DW200457

Features

- Wide choice of Connectivity with Profibus, Modbus, DeviceNet, etc.
- DIN Rail, IP20
- Supports 2 AS-interface Rungs
- Easy configuration and diagnostic by using the integrated display
- AS-Interface certificate



Common AS-I advantages

- Less installation effort because of single flat cable for power and data transmission
- Simple and inexpensive bus interfaces because of protocol ASICs
- Deterministic System behavior because of cyclic polling of max 10 msec cycle time (150 µsec per slave)
- No configuration software is required. Automatic address mode and automatic identification of analog devices
- Reduces maintenance cost because of standardized components

Typical applications

- Machine Tool Industry
- Handling Systems
- Motion Control Applications
- Design for rough environments







- Profibus version -

- Ethernet version -

AS-interface functionality

Due to cost pressure, the increasing demand for process safety and process documentation, the idea of an open digital sensor actuator bus system was born in the early 1990s.

Today, the AS-interface system is a single **Master-Slave system with cyclic polling**. Each network supports up to 62 slaves, each with up to 4 Input and 3 Output. In summary up to 248 Inputs and 186 Outputs can be connected on each rung. Also intelligent slaves with their own integrated AS-I ASIC are able to get their own slave addresses. With just a single flat cable, power and information are transmitted to each slave.

In addition to the data exchange, AS-Interface network supports a detailed diagnostic interface regarding the power behavior of the network.

Description

The Woodhead AS-Interface Gateway line provides an easy integration path for your AS-I sensors and actuators into other fieldbus systems like Profibus, Ethernet or DeviceNet.

The Woodhead AS-I Gateways act as a Master in the AS-I system and as a Slave for the selected Fieldbus-System . For the Master of the fieldbus system the AS-I gateway always behaves like a modular I/O device. System setup as well as Error handling can be done without any Serial communication, simply by using the buttons and display on the Gateways.

Supported functions are:

- Slave addressing
- Slave diagnostic
- Fieldbus slave addressing

According to the 2.1 specifications, Woodhead Gateways support both AS-I slaves 2.1 and slaves 2.0 versions. Few limitations on 2.0 slaves version as:

- No extended diagnostic
- Function block oriented Analog Data handling
- No A/B addressing mode

Woodhead

AS-Interface Gateways

Hardware Specifications

Feature	DRL-2ASI-PFB	DRL-2ASI-DN	DRL-2ASI-ETH	DRL-2ASI-CAN	DRL-2ASI-SER
Supported Protocol	Profibus-DP Slave, DIN 19245, part3	DeviceNet, Group2-Slave, No strobed IO	Modbus TCP/IP IEEE 802.3	CANopen Slave, DS 401	Modbus Serial, RS 485
Connector Type AS-Interface Bus Interface	Screw terminals Sub-D, 9 pole	Screw terminals CombiCon	Screw terminals RJ 45	Screw terminals CombiCon	Screw terminals Sub-D, 9 pole
Baud rate	9.6K -12M Baud	125K – 500K Baud	10M Baud	10K – 1M Baud	1.2K – 57.6K Baud
AS-cycle time	150ms * (n° slaves+1)	150ms * (n° slaves+1)	150ms * (n° slaves+1)	150ms * (n° slaves+1)	150ms * (n° slaves+1)
Display	Yes	Yes	Yes	Yes	Yes
Push Buttons	4	4	4	4	2 (set/mode)
Housing	DIN Rail IP 40, screw terminal IP20	DIN Rail IP 40, screw terminal IP20	DIN Rail IP 40, screw terminal IP20	DIN Rail IP 40, screw terminal IP20	DIN Rail IP 40, screw terminal IP20
Dimension (LxWxH)	75 x 100 x 110mm	75 x 100 x 110mm	75 x 100 x 110mm	75 x 100 x 110mm	75 x 100 x 110mm
Operating Temp	0° C to +55° C	0° C to +55° C	0° C to +55° C	0° C to +55° C	0° C to +55° C
Storage Temp	-25° C to +85° C	-25° C to +85° C	-25° C to +85° C	-25° C to +85° C	-25° C to +85° C

Ordering Information

Part Number	Description		
DRL-2ASI-PFB	AS-I / Profibus Gateway, 2 Channels, Integrated Display		
DRL-2ASI-DN	AS-I / DeviceNet Gateway, 2 Channels, Integrated Display		
DRL-2ASI-ETH	AS-I / Modbus TCP Gateway, 2 Channels, Integrated Display		
DRL-2ASI-CAN	AS-I / CANopen Gateway, 2 Channels, Integrated Display		
DRL-2ASI-SER	AS-I / Modbus Serial Gateway, 2 Channels, Integrated Display		

Related Products

Part Number	Description
TAS-422-CD4-00	IP 67 I/O Module, M12 Format 4DI / 4DO
TAS-422-8E4-00	IP 67 I/O Module, M8 Format 2DI / 2DO
8V5032P03M010	AS-Interface Converter, 2 ports, M12 female straight with 1 m wire, IP67
SST-ASI-SLC	AS-Interface Backplane Module for AB-SLC
SST-ASI-CLX	AS-Interface Backplane Module for AB-ControlLogix
SST-ASI-CMX	AS-Interface Backplane Module for AB-MicroLogix and CompactLogix

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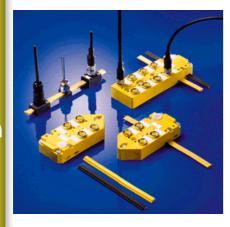
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The Woodhead Gateways are available

for the following networks:

Modbus TCP/IP ✓ Modbus serial

✓ Profibus-DP ✓ DeviceNet

CANopen

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