



Easy-to-use Interface Modules to connect AS-Interface Slaves with your Allen-Bradley System.

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AS-interface for Allen-Bradley

Direct Access to I/O data mapped into the PLC's memory

Features

- Fast and easy setup into ControlLogix or MicroLogix Backplane
- Supports up to 2 AS-i rungs (CLX)
- AS-i Specification 2.1
- Up to 124 AS-i slaves to connect
- Simple and easy commissioning with 2 push buttons and the integrated display



AS-interface Master for A-B CompactLogix / MicroLogix 1500

1 AS-i Channel



AS-interface Master for A-B ControlLogix

2 AS-i Channels



AS-interface functionality

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 ms 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

Because of the 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 90th. The AS-interface system today 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 get their own slave address. Just with a single flat cable, power and information are transmitted to each slave. In addition to the data exchange, AS-Interface networks supports a detailed diagnostic interface regarding the power behavior of the network.

Description

AS-Interface Master connects a CompactLogix processor or a MicroLogix 1500 to an AS-Interface network. Fast, easy set up into PLC backplane by the help of the new AS-Interface Master. The AS-Interface Master already fulfils the new specification 2.1. AS-Interface I/O data and status information is mapped into the PLC processor's I/O data. The transfer of analog signals via AS-Interface as well as the diagnosis of the AS-Interface peripheral fault is integrated in the master.

Typical applications

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

AS-Interface Scope Function

The diagnostics, which go far beyond the standard diagnostics, facilitate the simple detection of the occasionally occurring configuration errors and further irritations towards the AS-Interface communication. So in case of an error the down time of machines can be minimized or you can initiate preventive maintenance.

Commissioning and Monitoring

The AS-Interface Master can be commissioned respectively programmed with the help of the software "AS-Interface Control Tools".

AS-I Master for Allen-Bradley



Technical data

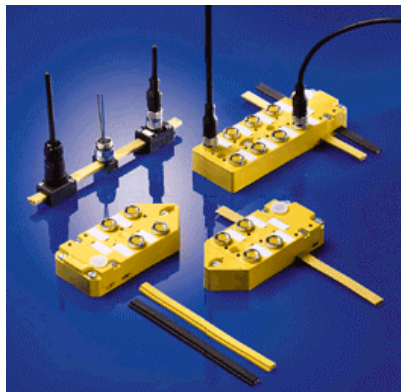
Related Products



- AS-Interface for A-B SLC -



- AS-Interface gateways -



- IP67 I/O Module -

Mechanical data Interface for ControlLogix	
Degree of protection:	IP20 acc. to DIN 40050
Ambient operating T°:	-0° to + 55° C
Storage T°	-25° to + 85° C
Mounting:	A-B ControlLogix Backplane
Dimensions (LxWxH)	146*35*132 mm
Electrical data Interface for ControlLogix	
Operating current	Approx. 70 mA out of AS-interface circuit 1 Approx. 70 mA out of AS-interface circuit 2 Approx. 390 mA out of power supply 5 V DC Approx. 2 mA out of power supply 24 V DC
Operating Voltage	30 V DC
Voltage of Insulation	500 V
AS-i cycle time	150 µs* (number of slaves + 2)
LED configuration	Green (PWR) → Power on Green (OK) → Communication Red (Fault) → Configuration error Green (U AS-i) → Voltage OK Green (prg enable) → Automatic address Yellow (prj mode) → config Mode Green (AS-i act) → AS-i normal active

Mechanical data Interface for MicroLogix 1500	
Degree of protection:	IP20 acc. to DIN 40050
Ambient operating T°:	-0° to + 55° C
Storage T°	-25° to + 85° C
Mounting:	A-B MicroLogix Backplane
Dimensions (LxWxH)	102*35*132 mm
Electrical data Interface for MicroLogix 1500	
Operating current	Approx. 100 mA out of AS-i circuit Approx. 450 mA out of power supply 5 V
Operating Voltage	30 V DC
Voltage of Insulation	500 V
AS-i cycle time	150 µs* (number of slaves + 2)
LED configuration	Green (PWR) → Power on Green (OK) → Communication Red (Fault) → Configuration error Green (U AS-i) → Voltage OK Green (prg enable) → Automatic address Yellow (prj mode) → config Mode Green (AS-i act) → AS-i normal active

Ordering Information

Part Number	Description
SST-ASI-CLX	AS-i Master/Scanner Module for A-B ControlLogix, 2 AS-i Channels
SST-ASI-CMX	AS-i Master/Scanner Module for A-B CompactLogix 1500, 1 AS-i Channel

Related Products

Part Number	Description
SST-ASI-SLC	AS-interface Master/Scanner Module for A-B SLC-500, 2 AS-i Channels
DRL-2ASI-PFB	AS-interface Gateway, 2 Channels AS-i, 1 PROFIBUS-DP, IP20
DRL-2ASI-ETH	AS-interface Gateway, 2 Channels AS-i, 1 Modbus TCP/IP, IP20
TAS-PWR-4A	AS-interface Power supply, 230 V / 4 A
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-i Converter, 2 ports, M12 female 90° straight with 1 m wire, IP67

To contact us: www.woodheadconnectivity.com



Europe: France, +33 2 32 96 04 20 – Germany, +49 711 782 3740 – Italy, +39 010 59 30 77 – United Kingdom, +44 1495 356300
North America: Canada, +1 519 725 5136
Asia: China, +86 21 50328080 – Singapore, +65 261 6533 – Japan, +81 45 224 3560