

Network Master Simulators

- Connect AS-I Gateways to PC for Configuration and Troubleshooting
- Test and Troubleshoot Network Devices

MS-DP BW1131



MS-DP BW1131 is a PROFIBUS®-DP Master Simulator designed to connect PROFIBUS stations to a PC via the serial port. It is ideal for testing, troubleshooting and demonstrating PROFIBUS products. It communicates at rates up to 19.2 kbaud.

MS-DP BW1257



MS-DP BW1257 is a PROFIBUS-DP Master Simulator designed to connect PROFIBUS stations to a PC via the serial port. It features DPV1 communication capability. It is ideal for testing, troubleshooting and demonstrating PROFIBUS products. It communicates at rates up to 19.2 kbaud.

MS-DP BW1258



MS-DP BW1258 is a PROFIBUS-DP Master Simulator designed to connect PROFIBUS stations to a PC via the serial port. It features DPV1 communication capability. It is ideal for testing, troubleshooting and demonstrating PROFIBUS products. This version is powered from a separate 24 VDC supply, and communicates at rates up to 1.5 Mbaud.

IC-232-485 BW1094



IC-232-485 BW1094 is an interface converter that allows RS-485 devices to be connected to a PC RS232 serial port. It is used for connecting the RS-485 AS-I masters to the AS-I Control Tools software for configuration and maintenance.

MS-DN BW1420



MS-DN BW1420 is a DeviceNet™ Master Simulator designed to connect DeviceNet stations to a PC via the USB port. It is ideal for testing, troubleshooting and demonstrating DeviceNet products.

MS-DN BW1625



MS-DN BW1625 is a DeviceNet Master Simulator designed to connect DeviceNet stations to a PC via the PCI backplane. It is ideal for testing and troubleshooting DeviceNet products.

MS-CO BW1453



MS-CO BW1453 is a CANopen Master Simulator designed to connect CANopen stations to a PC via the USB port. It is ideal for testing, troubleshooting and demonstrating CANopen products.

CORD-DSUB BW1097



CORD-DSUB BW1097 is an RS-485 compatible cord that connects IP 65 masters and gateways (i.e. ASI-DPG BW1253) to a PC for commissioning and programming.

CORD-DSUB BW1058



CORD-DSUB BW1058 is a serial 9-in DSUB extension cord that connects masters and gateways to a PC for commissioning and programming.

CORD-DSUB BW1226



CORD-DSUB BW1226 is a CAN compatible cord that connects DeviceNet™ and CANopen gateways to the DeviceNet master simulators (BW1420, BW1625) for commissioning and programming.

ASI-PD BW1646



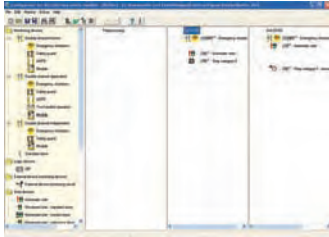
ASI-PD BW1646 is a handheld addressing tool for AS-I. It also allows the user to test I/O and slave functionality.

ASI-ANALYZER BW1415



The **ASI-ANALYZER BW1415** is a diagnostic and troubleshooting tool for AS-I systems. The analyzer displays the status of each slave on the network, as well as other details (such as power supply level), and can be used to provide diagnostics for low level AS-I messages. It allows the user to track and observe potential communication failures before they become real problems.

ASI-MON BW1770



ASI-MON BW1770 is a Windows program for use in configuring and diagnosing AS-I Safety at Work systems using the AS-I Safety Monitors. Connection to the safety monitors is made via the PC serial port.

ASI-SIM-SW BW1902

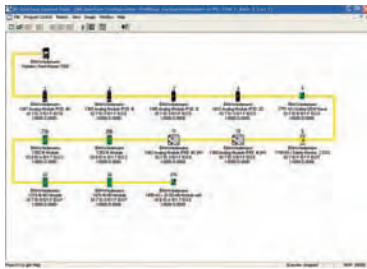


ASI-SIM-SW BE1902 is a MS Windows program that allows simulation and download of AS-I control programs for supported AS-I masters (masters with mini PLC capability). The package includes the ASI-SIM software, ASI-CT BW1203 AS-I Control Tools program and a cable to connect to the stainless steel programming port.

ASI-CT-SS BW1602

ASI-CT-AB BW1563

ASI-CT BW1203



AS-I Control Tools is a MS Windows program for commissioning and programming Bihl+Wiedemann AS-I masters and gateways. The program allows the user to set addresses of slaves, test and manipulate I/O and view diagnostic information.

The **BW1602** package includes a cable to connect gateways in the stainless steel housing to a PC serial port.

The **BW1563** package includes a cable to connect the ASI-SCAN-AB BW1416 and ASI-SCAN-AB BW1488 PLC cards to a PC serial port.

ASI-EVAL-KIT BW1565



The **ASI-EVAL-KIT BW1565** enables easy commissioning of the AS-I OEM master module (ASI-MM-PCB BW1670, p. E79-80). The carrier board has a 5 V controller and an RS232 converter to communicate with the OEM module via the AS-I Control Tools software. The board also has a terminal connector for connection to the AS-I system.

The kit is designed to aid users in developing applications for the OEM AS-I masters.

ASI-TERM BW1644



ASI-TERM BW1644 is an AS-I terminator designed to allow an AS-I segment to be extended up to 200 m. It includes an LED for basic system diagnostic information. It is a passive device, used in a similar manner to the active AS-I tuner (pages E69-70).

AS-I Standard Base Modules

- Connect IP 65 Stations to AS-I and Power
- Round or Flat Cable Supported

ASI-BM BW1180



Standard AS-I base module with two AS-I flat cable ports.

ASI-BM BW1181



Standard AS-I base module with one AS-I flat cable port and one isolated flat cable port. For use with AS-I devices requiring two separate connections (i.e. repeaters, power extenders, couplers, slaves with auxiliary powered I/O).

ASI-BM BW1438



Standard AS-I base module with two AS-I flat cable ports. Includes addressing port for handheld device.

ASI-BM BW1182



Standard AS-I base module with two AS-I round cable ports. Connections are made via screw terminals.

ASI-BM BW1183



Standard AS-I base module with one AS-I round cable port and one isolated round cable port. For use with AS-I devices requiring two separate connections (i.e. repeaters, power extenders, couplers, slaves with auxiliary powered I/O). Connections are made via screw terminals.

AS-I Couplers

- Connect 2 AS-I Networks Together
- Communicate Via Internal Slaves



ASI-CPL BW1187
ASI-CPL BW1280



Electrical

- Operating Current: <80 mA per AS-I Network

Power Distribution

- From each AS-I network

Mechanical

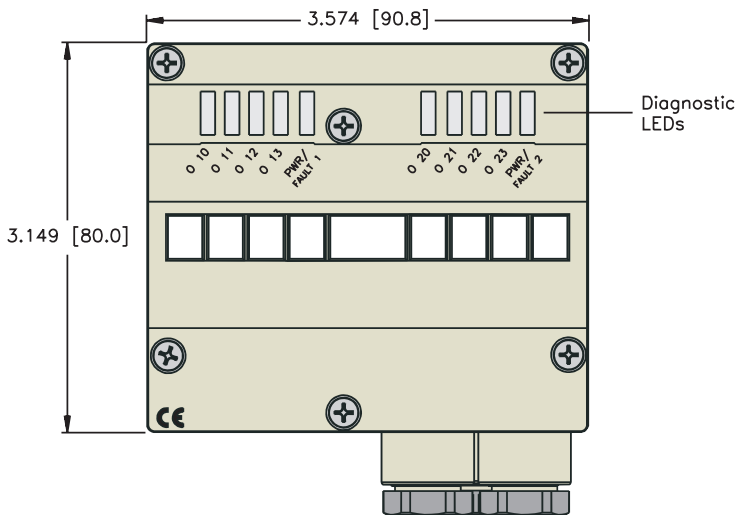
- Operating Temperature: 0 to +55°C (+32 to +131°F)
- Protection: IP 20 (BW1187), IP65 (BW1280)

Material

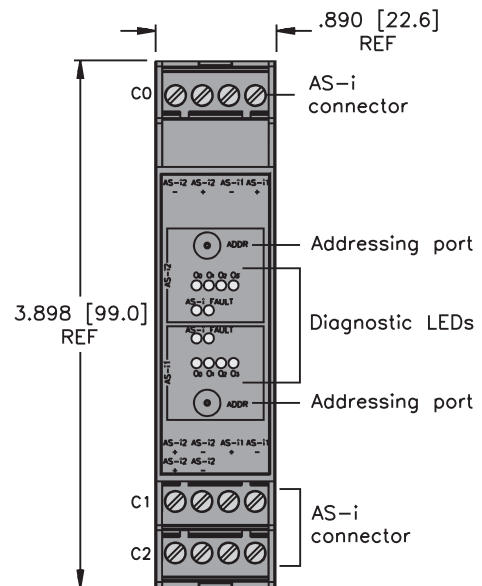
- Housing: Plastic

Diagnostics (Physical)

- LEDs to indicate status of AS-I communication and power supply



ASI-CPL BW1280



ASI-CPL BW1187

Note: ASI-CPL BW1280 makes connections to each AS-I network via standard base modules with two isolated ports (ASI-BM BW1181 for flat cable, ASI-BM BW1183 for round cable with screw terminals). See pages 105-106.

AS-interface® Couplers

AS-I Couplers provide a means to route data between two PLC's using AS-I. The couplers (similar to a DeviceNet™ spanner) directly connect AS-I networks, eliminating the need for a high level control network pyramid. This simple approach is extremely powerful and economical. It is simple because the coupler appears as a standard AS-I slave to each PLC; any AS-I scanner can send I/O data to the coupler without additional software or complex configuration procedures. It is economical because it replaces the high level control network, eliminating two control cards, wiring, conduit and programming.

Theory of Operation

A coupler transfers data between PLC A and PLC B by appearing as I/O to each PLC. The coupler immediately copies the output data from PLC A to the input data for PLC B. Similarly, PLC B's output data is copied to PLC A's input data. The data transfer may be four bits in each direction (the maximum allowable data size for one slave on one AS-I scan cycle).

Electrically

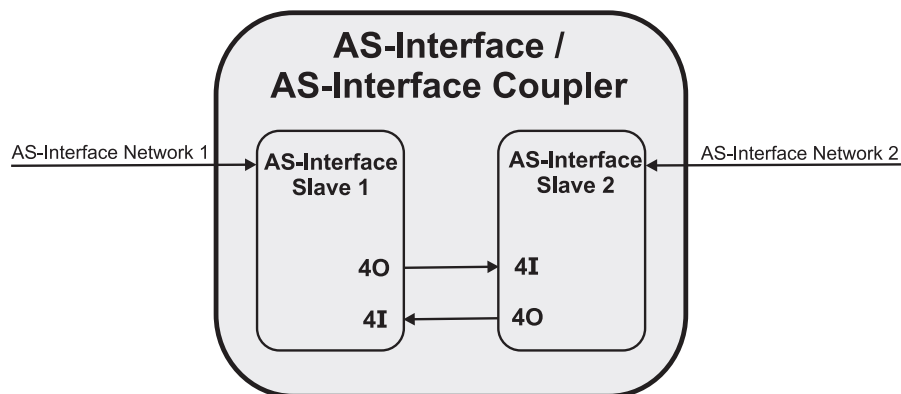
The coupler optically isolates network A from network B; the networks do not interact electrically in any way. The coupler is powered internally by the AS-I power supply for the two connected networks.

Addressing

Because the coupler is essentially two AS-I devices, one on network A and one on network B, it must be addressed as a slave on each network. The addresses for the two networks are independent of each other and do not need to be set to the same value.

Coupler Topology

The coupler is typically used to correct and coordinate multiple work cells.



Note: Physical AS-I connections are made via standard dual isolated port AS-I base modules (ASI-BM BW1181 for flat cable or ASI-BM BW1183 for round cable with screw terminal connections) on pages E105-106.