ASi-3 EtherCAT Gateways in Stainless Steel



EtherCAT to ASi 1 / 2 ASi-3 Master

Recognition of Duplicate ASi addresses

ASi Earth Fault Detector integrated

ASi Noise Detector integrated



(figure similar)







| Figure | Fieldbus interface ⁽¹⁾ | | ASi networks, number of ASi Master ⁽²⁾ | | configuration interface (4) | Recognition of duplicate ASi addresses (5) | ASi fault detector ⁽⁶⁾ | Article no. |
|--------|--------------------------------------|------------------|---|--|-----------------------------|--|--------------------------------------|-------------|
| | EtherCAT | ASi-3 compatible | 2 ASi networks, 2 ASi-3 Masters | no, max. 8 A/ASi network, redun- dant supply | RS 232 | yes | yes | BWU2163 |
| | EtherCAT | ASi-3 compatible | | no, max. 8 A/ASi network | RS 232 | yes | yes | BWU2162 |

(1) Fieldhus interface

Communication interface between fieldbus and gateway: interfaces for standardized fieldbus systems in industrial automation. **PROFINET ASI Gateway**: interface for a PROFINET fieldbus

- (2) Number of ASi networks, number of ASi Master
 - "Single Master": 1 ASi network, 1 ASi-3 Master.
 - "Double Master": 2 ASi networks, 2 ASi-3 Masters.

(3) Integrated decoupling, ASi current measurement in the gateway

"yes, max. 4 A/ASi network": Data decoupling integrated in the gateway. Cost-effective power for 2 ASi networks with 1 power supply (optionally supply of multiple Single Gateways by 1 power supply). Operation with short cable lengths with standard 24 V power supply possible.

"no, max. 8 A/ASi network, redundant supply": 1 power supply per ASi network. Gateway is powered in normal operation from one of the two ASi power supplies. Should one ASi power supply fail, switching to the other ASi power supply allows all the diagnostics functions to be maintained and the unaffected ASi network continues to operate.

"no, max. 8 A/ASi network": 1 power supply per ASi network.

(4) Diagnostic and configuration interface

"Ethernet fieldbus": Access to ASi Master and Safety Monitor with Bihl+Wiedemann software by using the Ethernet fieldbus interface.

The latest version of the device description file of the gateway is available in the "Downloads" section of the respective device.

(5) Recognition of duplicate ASi addresses

Detects whether the same address has been assigned to two ASi nodes. Frequent error when using a handheld addressing device.

(6) ASi fault detector

Checks the ASi line for interference effects such as noise, external voltages, ...

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| Article no. | BWU2162 / BWU2163 | | | |
|--|---|--|--|--|
| Fieldbus Interface | | | | |
| Туре | EtherCAT; | | | |
| | according to IEEE 802.3 (RJ-45 connector) | | | |
| Baud rates | 100 MBaud | | | |
| Diagnostic Interface | | | | |
| Туре | RS232 RJ-45 according to IEEE 802.3 | | | |
| ASi | | | | |
| ASi specification | 3.0 | | | |
| ASi cycle time | 150μs * (number of ASi-3 nodes + 2) | | | |
| Operating voltage | 30 V _{DC} (20 31,6 V) | | | |
| Display | | | | |
| LCD | displaying ASi addresses and error messages | | | |
| LED power (green) | power on | | | |
| LED ser active (green) | EtherCAT-Network active | | | |
| LED config error (red) | configuration error | | | |
| LED U ASi (green) | ASi voltage OK | | | |
| LED ASi active (green) | ASi normal operation active | | | |
| LED prg enable (green) | automatic address programming enabled | | | |
| LED prj mode (gelb) | master is in configuration mode | | | |
| Environment | | | | |
| Applied standards | EN 61000-6-2 EN 61000-6-4 | | | |
| Haveine | 1 111 1 | | | |
| Housing | the master is in configuration mode | | | |
| Operating temperature | 0°C +55°C | | | |
| Storage temperature | -25°C +85°C | | | |
| Pollution degree | | | | |
| Protection class IEC 60 529 | IP20 | | | |
| Tolerable loading referring to humidity | according to EN 61131-2 | | | |
| Maximum tolerable shock and vibration stress | EN 61 131-2 | | | |
| Voltage of insulation | ≥ 500V | | | |
| Dimensions (W / H / D) in mm | 85 / 120 / 83 | | | |
| Weight | 500g | | | |

| | Operating current | | | | | |
|----------|--|--|--|--|--|--|
| Art. no. | Master power supply approx. 200mA out of ASi circuit | Master power supply, max. 200mA out of ASi circuit 1 (approx. 70mA 200mA) max. 200mA out of ASi circuit 2 (approx. 70mA 200mA) | Cost-effective power for 2 ASi networks with 1 power supply, approx. 250mA (PELV supply) | | | |
| BWU2162 | • | - | - | | | |
| BWU2163 | - | • | - | | | |

BW2163: Redundant power supply out of ASi:

all fundamental functions of the device remain available even in case of power failure in one of the two ASi networks

Accessories:

- Software "ASi Control Tools" with serial cable for ASi master in stainless steel (art. no. BW1602)
- Cross-Link cable (art. no. BW1304)
- Power supplies, e.g.: ASi power supply, 4 A (art. no. BW1649), ASi power supply, 8 A (art. no. BW1997)
 (further power supply units can be found at www.bihl-wiedemann.de/en/products/accessories/power-supplies)