

ASi-3 POWERLINK Gateway in Stainless Steel, 2 masters

Recognition of duplicate ASi addresses

ASi Earth Fault Detector integrated



ASi Noise Detector integrated

Optional Control III, programmable in C



(Figure similar)



| Figure | Type | Model | Fieldbus interface ⁽¹⁾ | Number of ASi networks, number of ASi Master ⁽²⁾ | 1 power supply, 1 gateway for 2 ASi networks, inexpensive power supplies ⁽³⁾ | Diagnostic and configuration interface ⁽⁴⁾ | Recognition of duplicate ASi addresses ⁽⁵⁾ | ASi fault detector ⁽⁶⁾ | Prog. in C ⁽⁷⁾ | Article no. |
|---|----------------|---------|-----------------------------------|---|---|---|---|-----------------------------------|---------------------------|----------------|
|  | POWER-LINK ASi | Gateway | POWERLINK | 2 ASi networks, 2 ASi Masters | no, max. 8 A/ ASi network, redundant supply | Ethernet diagnostic | yes | yes | optional | BWU3537 |
|  | POWER-LINK ASi | Gateway | POWERLINK | 2 ASi networks, 2 ASi Masters | ja, max. 4 A/ ASi network | Ethernet diagnostic | yes | yes | optional | BWU3593 |

(1) Fieldbus interface

Communication interface between fieldbus and gateway: interfaces for standardized fieldbus systems in industrial automation.
POWERLINK ASi Gateway: interface for a POWERLINK fieldbus

(2) Number of ASi networks, number of ASi Master

"Double Master": 2 ASi networks, 2 ASi Masters.

(3) 1 power supply, 1 gateway for 2 ASi networks, inexpensive power supplies

"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.

(4) Diagnostic and configuration interface

"Ethernet diagnostic": Access to ASi master and safety monitor with Bihl+Wiedemann proprietary software by using the Ethernet diagnostics 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 hand held addressing device.

(6) ASi fault detector

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

(7) Programming in C

Using a C-program offers the possibility to run mini-PLC functions with a gateway.

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| Article no. | BWU3537 | BWU3593 |
|--|---|---------|
| Interface | | |
| POWERLINK interface | •2 x RJ-45 Ethernet acc. to IEEE 802.3 •integrated 2-Port-Hub •POWERLINK acc. to IEC 61748-2 and IEC 61158 | |
| Baud rates | 100 MBaud | |
| Card slot | Chip card (128 KB) for storage of configuration data | |
| ASi | | |
| ASi specification | 3.0 | |
| Cycle time | 150 μ s * (number of nodes + 2) | |
| Operating voltage | 30 V _{DC} (20 ... 31,6 V) | |
| ASi Power24V capability ⁽¹⁾ | no | yes |
| Display | | |
| LCD | menu, indication of ASi addresses, error messages in plain text | |
| LED power (green) | power ON | |
| LED POWERLINK (green) | POWERLINK communication active | |
| LED config error (red) | configuration error | |
| LED U ASi (green) | ASi voltage o.k. | |
| LED ASi active (green) | ASi normal operation active | |
| LED prg enable (green) | automatic address programming enabled | |
| LED prj mode (yellow) | master is in configuration mode | |
| UL-specifications (UL508) | | |
| External protection | An isolated source with a secondary open circuit voltage of ≤ 30 V _{DC} has to be protected with a 3 A maximum over current. Over current protection is not required when a Class 2 source is employed. | |
| In general | UL mark does not provide UL certification for any functional safety rating or aspects of the above devices. | |
| Environment | | |
| Applied standards | EN 61000-6-2 EN 61000-6-4 EN 60529 | |
| Housing | Stainless Steel, for DIN rail mounting | |
| Operating temperature | 0 °C ... +55 °C | |
| Storage temperature | -25 °C ... +85 °C | |
| Pollution degree | 2 | |
| Protection category | IP20 | |
| Tolerable loading referring to humidity | according to EN 61131-2 | |
| Maximum tolerable shock and vibration stress | according to EN 61131-2 | |
| Voltage of insulation | ≥ 500 V | |
| Dimensions (W / H / D in mm) | 85 / 120 / 83 | |
| Weight | 520 g | |

⁽¹⁾ **ASi Power24V**

The device can be operated directly on a 24 V (PELV) power supply. The gateway has been optimized with integrated data coupling coils and adjustable self-resetting fuses for safe use of powerful 24 V power supplies.

| Article no. | Operating current | | |
|-------------|--|---|---|
| | Master power supply, ca. 200 mA out of ASi circuit | Master power supply, max. 200 mA out of ASi circuit 1 (ca. 70 mA ... 200 mA), max. 200 mA out of ASi circuit 2 (ca. 70 mA ... 200 mA); in sum max. 270 mA | Version „1 gateway, 1 power supply for 2 ASi networks“, approx. 250 mA (PELV voltage) |
| BWU3537 | - | • | - |
| BWU3593 | - | - | • |

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| | BWU3537 | BWU3593 |
|---|---------|---------|
| 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 | • | – |
| Current measurement of the ASi circuits | – | • |
| Self-resetting adjustable fuses | – | • |
| ASi earth fault monitor distinguishes between ASi cable and sensor cable | – | • |
| In version 1 gateway, 1 power supply for 2 ASi networks: only 1 Gateway + 1 ASi power supply for 2 ASi networks | – | • |

Accessories:

- Chip card, memory capacity 128 KB (art. no. BW2222)
- Software for diagnostics, service and approval measurements (art. no. BW2902)
- Control III, Programming in C (art. no. BW2582)
- 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)