

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	Fieldbus interface ⁽¹⁾	ASi-5/ASi-3	Number of ASi networks, number of ASi Master ⁽²⁾	Integrated decoupling, ASi current measurement in the gateway ⁽³⁾	Diagnostic and configuration interface ⁽⁴⁾	Recognition of duplicate ASi addresses ⁽⁵⁾	ASi fault detector ⁽⁶⁾	Prog. in C ⁽⁷⁾	Article no.
	POWERLINK	ASi-3 compatible	2 ASi networks, 2 ASi-3 Masters	yes, 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-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.

(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.	BWU3593
Fieldbus Interface	
Type	POWERLINK acc. to IEC 61748-2 and IEC 61158 2 x RJ-45 Ethernet acc. to IEEE 802.3 integrated 2-Port-Hub
Transmission rate	100 MBit/s
Card slot	Chip card (128 KB) for storage of configuration data
Diagnostic Interface	
Type	Ethernet; RJ-45 according to IEEE 802.3
ASi	
ASi specification	3.0
Transmission rate	10/100 MBit/s
Cycle time	150 µs * (number of ASi-3 nodes + 2)
Operating voltage	30 V _{DC} (20 ... 31,6 V)
ASi Power24V capability ⁽¹⁾	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.

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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	Cost-effective power for 2 ASi networks with 1 power supply, approx. 250 mA (PELV voltage)
BWU3593	–	–	•

	BWU3593
Data decoupling integrated in the gateway	•
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	•
2 ASi networks with 1 power supply	•

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.: 30 V power supply, 4 A, 1 phase (art. no. BW4218), 30 V power supply, 8 A, 1 phase (art. no. BW4219), 30 V power supply, 8 A, 3 phases (art. no. BW4220), 30 V Power Supply, 16 A, 1 phase (art. no. BW4221), 30 V Power Supply, 16 A, 3 phases (art. no. BW4222) (for further power supply units visit www.bihl-wiedemann.de/en/products/accessories/power-supplies)

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