

ASi-3 PROFIBUS Gateways in Stainless Steel

Recognition of duplicate ASi addresses

ASi Earth Fault Detector integrated

ASi Noise Detector integrated



Optional Control III, programmable in C

GSD file integrated



(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⁾	Article no.
	PROFIBUS	ASi-3 compatible	2 ASi networks, 2 ASi-3 Masters	yes, max. 4 A/ ASi network	Ethernet diagnostic	yes	yes	BWU2546
	PROFIBUS	ASi-3 compatible	1 ASi network, 1 ASi-3Master	yes, max. 4 A/ ASi network	Ethernet diagnostic	yes	yes	BWU2775

(1) Fieldbus interface

Communication interface between fieldbus and gateway: interfaces for standardized fieldbus systems in industrial automation.

PROFIBUS ASi Gateway: interface for a PROFIBUS fieldbus

PROFIBUS ASi Basic Gateway: interface for a PROFIBUS 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.

(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.

"RS 232": Access to ASi master and safety monitor with Bihl+Wiedemann proprietary software by using an adapter cable via RS 232 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.

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Article no.	BWU2546 / BWU2775
Fieldbus Interface	
Type	PROFIBUS; IEC 61158 / IEC 61784-1
Baud rates	9,6 Kbaud up to 12 000 Kbaud, automatic recognition
DP functions	imaging of the ASi nodes as I/O Data of the PROFIBUS complete diagnosis and configuration via the DP Master
Card slot	Chip card for storage of configuration data
Diagnostic Interface	
Type	Ethernet; Rj-45 acc. to IEEE 802.3
ASi	
ASi specification ⁽¹⁾	3.0
Cycle time	150 μ s * (number of ASi-3 nodes + 2)
Operating voltage	30 V _{DC} (20 ... 31,6 V)
ASi Power24V capability ⁽²⁾	yes
Display	
7-Segment display	–
LCD	menu, ASi indication of node addresses, error messages in plain text
LED power (green)	power ON
LED PROFIBUS (green)	PROFIBUS Master recognized
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} with a 3 A maximum over current protection. 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 62026-2 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 DIN EN 60529	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
Weight	460 g
Dimensions (W / H / D in mm)	75 / 120 / 93

⁽¹⁾ **All currently supplied devices comply with standard ASi 3.0.**

⁽²⁾ **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, max. 200 mA out of ASi circuit 1 (ca. 70 mA ... 200 mA), max. 200mA out of ASi circuit 2 (ca. 70 mA ... 200 mA); in sum max. 270 mA	Master power supply, ca. 200 mA out of ASi circuit 1 ca. 70 mA out of ASi circuit 2	Cost-effective power for 2 ASi networks with 1 power supply, approx. 250 mA (PELV voltage)	Master power supply, ca. 200 mA out of ASi circuit
BWU2546	-	-	•	-
BWU2775	-	-	•	-

	BWU2546 BWU2775
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	•
Cost-effective power for 2 ASi networks with 1 power supply	•

Accessories:

- Software for diagnostics, service and approval measurements (art. no. BW2902)
- PROFIBUS DP master simulator (art. no. BW1257)
- 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)