

AS-i 3.0 PROFIBUS Gateways in Stainless Steel

Recognition of duplicate AS-i addresses

AS-i Earth Fault Detector integrated

AS-i Noise Detector integrated

Optional Control III, programmable in C

GSD file integrated

AS-i Power24V capable



(Figure similar)



Figure	Type	Model	Fieldbus interface ¹	Number of AS-i networks, number of AS-i Master ²	1 power supply, 1 gateway for 2 AS-i networks, inexpensive power supplies ³	Diagnostic and configuration interface ⁴	Recognition of duplicate AS-i addresses ⁵	AS-i fault detector ⁶	Article no.
	PROFIBUS AS-i	Gateway	PROFIBUS	2 AS-i networks, 2 AS-i Masters	yes, max. 4 A/ AS-i network	RS 232	yes	yes	BWU1569
	PROFIBUS AS-i	Gateway	PROFIBUS	2 AS-i networks, 2 AS-i Masters	no, max. 8 A/ AS-i network, redundant supply	RS 232	yes	yes	BWU1568
	PROFIBUS AS-i	Gateway	PROFIBUS	1 AS-i network, 1 AS-i Master	yes, max. 4 A/ AS-i network	RS 232	yes	yes	BWU1891
	PROFIBUS AS-i	Gateway	PROFIBUS	1 AS-i network, 1 AS-i Master	no, max. 8 A/ AS-i network, redundant supply	RS 232	yes	yes	BWU1567

1 Fieldbus interface

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

PROFIBUS AS-i Gateway: interface for a PROFIBUS fieldbus

PROFIBUS AS-i Basic Gateway: interface for a PROFIBUS fieldbus

2 Number of AS-i networks, number of AS-i Master

"Single Master": 1 AS-i network, 1 AS-i Master;

"Double Master": 2 AS-i networks, 2 AS-i Masters.

3 1 power supply, 1 gateway for 2 AS-i networks, inexpensive power supplies

"yes, max. 4 A/AS-i network": Cost-effective power for 2 AS-i 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/AS-i network, redundant supply": 1 power supply per AS-i network. Gateway is powered in normal operation from one of the two AS-i power supplies. Should one AS-i power supply fail, switching to the other AS-i power supply allows all the diagnostics functions to be maintained and the unaffected AS-i network continues to operate.

"no, max. 8 A/AS-i network": 1 power supply per AS-i network.

4 Diagnostic and configuration interface

"Ethernet diagnostic": Access to AS-i master and safety monitor with Bihl+Wiedemann proprietary software by using the Ethernet diagnostics interface.

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

(GSD, GSDML, ... file for the Gateway is built into the web server)

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- 5 **Recognition of duplicate AS-i addresses**
Detects whether the same address has been assigned to two AS-i slaves. Frequent error when using a hand held addressing device.
- 6 **AS-i fault detector**
Checks the AS-i line for interference effects such as noise, external voltages, etc.

Article no.	BWU1567 BWU1568 BWU1569 BWU1891
Interface	
PROFIBUS interface	IEC 61158 / IEC 61784-1
Baud rates	9,6 Kbaud up to 12 000 Kbaud, automatic recognition
DP functions	imaging of the AS-i slaves as I/O Data of the PROFIBUS complete diagnosis and configuration via the DP Master
Card slot	–
AS-i	
Cycle time	150 µs * (number of slaves + 2)
Operating voltage	AS-i voltage 30 V DC
Display	
7-Segment display	–
LCD	menu, AS-i indication of slave addresses, error messages in plain text
LED power	power ON
LED PROFIBUS	PROFIBUS Master recognized
LED config error	configuration error
LED U AS-i	AS-i voltage o.k.
LED AS-i active	AS-i normal operation active
LED prg enable	automatic address programming enabled
LED prj mode	master is in configuration mode
Environment	
Applied standards	EN 61000-6-2 EN 61000-6-4
Housing	Stainless Steel, for DIN rail mounting
Operating temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Protection category DIN EN 60529	IP20
Maximum tolerable shock and vibration stress	according EN 61131-2
Voltage of insulation	≥ 500 V
Dimensions (W / H / D in mm)	75 / 120 / 83
Weight	460 g

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Article no.	Programming in C	GSD file integrated	Preprocessing	AS-i Power24V ¹	Safety Monitor integrated	AS-i Spec. ²
BWU1567	no	no	no	no	optional	3.0
BWU1568	no	no	no	no	optional	3.0
BWU1569	no	no	no	no	optional	3.0
BWU1891	no	no	no	no	no	3.0

¹ **AS-i Power24V capable**

The devices can be operated directly on a 24 V (PELV) power supply.

The gateway **BWU2546** and **BWU2775** are optimized with integrated data coupling coils and adjustable self-resetting fuses for safe use also of powerful 24 V power supplies.

² **AS-i 3.0 from ID no. 12003** (see lateral label) for BWU1567, BWU1568, BWU1569, BWU1773, BWU1774.

All currently supplied devices comply with standard AS-i 3.0.

Article no.	Operating current			
	Master power supply, max. 200 mA out of AS-i circuit 1 (ca. 70 mA ... 200 mA), max. 200mA out of AS-i circuit 2 (ca. 70 mA ... 200 mA); in sum max. 270 mA	Master power supply, ca. 200 mA out of AS-i circuit 1 ca. 70 mA out of AS-i circuit 2	Version „1 gateway, 1 power supply for 2 AS-i networks“, approx. 250 mA (PELV voltage)	Master power supply, ca. 200 mA out of AS-i circuit
BWU1567	–	–	–	•
BWU1568	•	–	–	–
BWU1569	–	–	•	–
BWU1891	–	–	–	•

	BWU1567 BWU1891	BWU1568	BWU1569
Redundant power supply out of AS-i: all fundamental functions of the device remain available even in case of power failure in one of the two AS-i networks	–	•	–
Current measurement of the AS-i circuits	–	–	–
Self-resetting adjustable fuses	–	–	–
AS-i earth fault monitor distinguishes between AS-i cable and sensor cable	–	–	–
In version 1 gateway, 1 power supply for 2 AS-i networks: only 1 Gateway + 1 AS-i power supply for 2 AS-i networks	–	–	•

Accessories:

- Software for diagnostics, service and approval measurements (art. no. BW2902)
- Power supplies, e.g.: AS-i power supply, 4 A (art. no. BW1649), AS-i power supply, 8 A (art. no. BW1997) (further power supply units can be found at www.bihl-wiedemann.de/en/products/accessories/power-supplies)
- PROFIBUS DP master simulator (art. no. BW1257)
- Control III, Programming in C (art. no. BW2582)