AS-i 3.0 PROFIBUS Gateways in Stainless Steel

Recognition of duplicate ASi addresses

ASi Earth Fault Detector integrated

ASi Noise Detector integrated

Optional Control II, preprocessing „ASi Control"

GSD file integrated

ASi Power24V capable

(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]	Article no.
	PROFIBUS ASi	Gateway	PROFIBUS	2 ASi networks, 2 ASi Masters	yes, max. 4 A/ ASi network	RS 232	yes	yes	**BWU1569**
	PROFIBUS ASi	Gateway	PROFIBUS	2 ASi networks, 2 ASi Masters	no, max. 8 A/ ASi network, redundant supply	RS 232	yes	yes	**BWU1568**
	PROFIBUS ASi	Gateway	PROFIBUS	1 ASi network, 1 ASi Master	yes, max. 4 A/ ASi network	RS 232	yes	yes	**BWU1891**
	PROFIBUS ASi	Gateway	PROFIBUS	1 ASi network, 1 ASi Master	no, max. 8 A/ ASi 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 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 Master;
"Double Master": 2 ASi networks, 2 ASi Masters.

3 **1 power supply, 1 gateway for 2 ASi networks, inexpensive power supplies**
"yes, max. 4 A/ASi network": 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 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.

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

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.

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 ASi nodes as I/O Data of the PROFIBUS complete diagnosis and configuration via the DP Master
Card slot	–
ASi	
Cycle time	150 µs * (number of ASi-3 nodes + 2)
Operating voltage	ASi voltage 30 V DC
Display	
7-Segment display	–
LCD	menu, indication of ASi addresses, error messages in plain text
LED power	power ON
LED PROFIBUS	PROFIBUS Master recognized
LED config error	configuration error
LED U ASi	ASi voltage o.k.
LED ASi active	ASi 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

AS-i 3.0 PROFIBUS Gateways in Stainless Steel

Article no.	Programming in C	GSD file integrated	Preprocessing	ASi Power24V[1]	Safety Monitor integrated	ASi 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 **ASi 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 **ASi 3.0 from ID no. 12003** (see lateral label) for BWU1567, BWU1568, BWU1569.
All currently supplied devices comply with standard ASi 3.0.

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	Version „1 gateway, 1 power supply for 2 ASi networks“, approx. 250 mA (PELV voltage)	Master power supply, ca. 200 mA out of ASi circuit
BWU1567	–	–	–	●
BWU1568	●	–	–	–
BWU1569	–	–	●	–
BWU1891	–	–	–	●

	BWU1567	BWU1568	BWU1569, BWU1891
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	–	–	–
Integrated decoupling	–	–	●

Accessories:

- **Software for diagnostics, service and approval measurements (art. no. BW2902)**
- **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*)**
- **PROFIBUS DP master simulator (art. no. BW1257)**
- **Control II, preprocessing „AS-i Control” (art. no. BW1618)**