

# ASi-5/ASi-3 PROFINET-Gateways in Stainless Steel

**ASi-5 – Great data bandwidth, short cycle times**

**Compatible with all ASi generations**

**ASi-5 Master and ASi-3 Master in one device**

**OPC UA server**

**2 ASi-5/ASi-3 masters, PROFINET device**

**PROFINET IO**

- offers IRT-technology
- 1 integrated Switch

**Integrated web server for simple diagnostics**

**Ethernet diagnostic interface**

**Recognition of duplicate ASi addresses**

**ASi Earth Fault Detector integrated**


**ASi Noise Detector integrated**

**Optional Control III, programming in C**



(figure similar)



Figure	Fieldbus interface <sup>(1)</sup>	ASi-5/ASi-3	Number of ASi networks, number of ASi Master <sup>(2)</sup>	Integrated decoupling, ASi current measurement in the gateway <sup>(3)</sup>	Diagnostic and configuration interface <sup>(4)</sup>	Recognition of duplicate ASi addresses <sup>(5)</sup>	ASi fault detector <sup>(6)</sup>	Programming in C <sup>(7)</sup>	Article no.
	PROFINET, OPC UA	ASi-5/ASi-3 compatible	2 ASi networks, 2 ASi-5/ASi-3 masters	yes, max. 4 A/ ASi network	Ethernet fieldbus + Ethernet diagnostic	yes	yes	optional	<b>BWU3852</b>

**(1) Fieldbus interface**

Communication interface between fieldbus and gateway: interfaces for standardized fieldbus systems in industrial automation.  
**PROFINET ASi Gateway:** interface for a PROFINET fieldbus  
**OPC UA server:** interface for the OPC UA communication.

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

**"Double Master":** 2 ASi networks, 2 ASi-5/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 fieldbus":** Access to ASi Master and Safety Monitor with Bihl+Wiedemann software by using the Ethernet fieldbus 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 handheld addressing device.

**(6) ASi fault detector**

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

**(7) Programming in C**

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

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<b>Article no.</b>	<b>BWU3852</b>
<b>Fieldbus Interface</b>	
Type	PROFINET; 2 x RJ-45, integrated 2-Port-Switch, IRT capability Conformance Class B integrated switch complies with Class C (IRT capability)
Baud rate	100 MBaud
OPC UA interface	OPC UA server + web server
Conformance Class	Class B integrated switch complies with Class C (IRT capability)
Function	PROFINET IO Device Media Redundancy Protocol (MRP) Shared Device
Card slot	Chip card (BW4055) for storage of configuration data
<b>Diagnostic Interface</b>	
Type	Ethernet; RJ-45 acc. IEEE 802.3
Baud rate	100 MBaud half/full duplex
OPC UA interface	OPC UA server + web server
<b>ASi</b>	
ASi specification	ASi-5 + ASi-3
Cycle time	<b>Cycle time ASi-5 (constant):</b> 1,27 ms for 384 bits input data + 384 bits output data <b>Cycle time ASi-3 (variable):</b> 150 $\mu$ s * (number of ASi-3 nodes + 2)
Operating current	ca. 250 mA
ASi Power24V capability <sup>(1)</sup>	yes
<b>Display</b>	
LCD	menu, indication of ASi addresses, error messages in plain text
LED power (green)	power ON
LED PROFINET (green/red)	green: PROFINET communication active red: PROFINET communication not 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)	in configuration mode
<b>UL-specifications (UL508)</b>	
External protection	An isolated voltage source with a PELV/SELV voltage $\leq 30 V_{DC}$ must have internal or external current limiting.
In general	UL mark does not provide UL certification for any functional safety rating or aspects of the above devices.

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<b>Article no.</b>	<b>BWU3852</b>
<b>Environment</b>	
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-4
Operating altitude	max. 2000 m
Operating temperature	-25 °C ... +55 °C (no condensation permitted)
Storage temperature	-25 °C ... +85 °C
Housing	Stainless Steel, for DIN rail mounting
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
Weight	500 g
Dimensions (W / H / D in mm)	85 / 120 / 93

**(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.

<b>Article no.</b>	<b>BWU3852</b>
<b>Data decoupling integrated in the gateway</b>	•
<b>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</b>	–
<b>Current measurement of the ASi circuits</b>	•
<b>Self-resetting adjustable fuses</b>	•
<b>ASi earth fault monitor distinguishes between ASi cable and sensor cable</b>	•
<b>Cost-effective power for 2 ASi networks with 1 power supply</b>	•

**Accessories:**

- Chip card, memory capacity 512 kB (art. no. BW4055)
- Bihl+Wiedemann Safety Suite - Safety Software for Configuration, Diagnostics and Commissioning (art. no. BW2902)
- 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](http://www.bihl-wiedemann.de/en/products/accessories/power-supplies))
- PROFINET Master Simulators Licenses (art. no. BW4754, BW4755)