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

1 ASi master, PROFINET device

PROFINET IO
- **offers IRT-technology**
- **1 integrated Switch**

integrated web server for simple diagnostics

Recognition of duplicate ASi addresses

ASi Earth Fault Detector integrated

ASi Noise Detector integrated

Optional Control III, programming in C

(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)	Program-ming in C (7)	Article no.
	PROFINET ASi-5/ASi-3	Gateway	PROFINET, OPC UA	1 ASi network, 1 ASi master	yes, max. 8 A/ ASi network	Ethernet fieldbus + Ethernet diag-nostic	yes	yes	optional	**BWU3848**

(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 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.

(4) **Diagnostic and configuration interface**
"Ethernet fieldbus + Ethernet diagnostic":
Access to ASi Master and Safety Monitor with Bihl+Wiedemann software by using the Ethernet diagnostic interface or 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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Article no.	BWU3848
Interface	
PROFINET interface	2 x RJ-45, integrated 2-Port-Switch, IRT capability Conformance Class B integrated switch complies with Class C (IRT capability)
OPC UA interface	OPC UA server + web server
Conformance Class	Class B integrated switch complies with Class C (IRT capability)
Baud rate	100 MBaud
Function	PROFINET IO Device Media Redundancy Protocol (MRP) Shared Device
Card slot	Chip card (512 KB) for storage of configuration data
ASi	
ASi specification	ASi-3 + ASi-5
Cycle time	**Cycle time ASi-3 (variable):** 150 µs * (number of ASi-3 nodes + 2)
	Cycle time ASi-5 (constant): 1,27 ms for 384 bits input data + 384 bits output data
Operating current	ca. 250 mA
Current per ASi network	max. 8 A
ASi Power24V capability (1)	yes
Display	
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
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 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	625 g
Dimensions (W / H / D in mm)	85 / 120 / 106

(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.

Article no.	BWU3848
Current measurement of the ASi circuits	•
Self-resetting adjustable fuses	•

Accessories:

- Chip card, memory capacity 512 kB (art. no. BW4055)
- Bihl+Wiedemann Suite - 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*)
- PROFINET Master Simulators Licenses (art. no. BW4754, BW4755)