

# ASi-3 PROFINET Gateway in stainless steel

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### 2 ASi-3 Master, PROFINET device

#### PROFINET IO

- offers IRT-technology
- 1 integrated Switch

#### 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 (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)	Programming in C (7)	Article no.
	PROFINET	Compatible with ASi-3	2 ASi networks, 2 ASi-3 Masters	yes, max. 8 A/ASi network	Ethernet fieldbus + Ethernet diagnostic	yes	yes	optional	<b>BWU4855</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

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

**"Double Master":** 2 ASi networks, 2 ASi-3 Masters.

(3) **Integrated decoupling, ASi current measurement in the gateway**

**"yes, max. 8 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 + Ethernet diagnostic":** 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>BWU4855</b>
<b>Fieldbus interface</b>	
Type	PROFINET; 2 x RJ-45, integrated 2-Port-Switch, IRT capability
Baud rate	10/100 MBaud
OPC UA interface	–
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 (128 KB) for storage of configuration data
<b>Diagnostic interface</b>	
Type	Ethernet; RJ-45 acc. to IEEE 802.3
Baud rate	10/100 MBaud half duplex/full duplex
OPC UA interface	–
<b>ASi</b>	
ASi specification	ASi-3
Number of ASi networks, number of ASi Masters	2 ASi networks, 2 ASi-3 Masters
Cycle time	<b>Cycle time ASi-3 (variable):</b> 150 $\mu$ s * (number of ASi-3 nodes + 2)
Operating current	ca. 250 mA
Current per ASi circuit	max. 8 A
ASi Power24V capability <sup>(1)</sup>	yes
<b>Display</b>	
LCD	menu, ASi 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 (UL61010)</b>	
In general	UL mark does not provide UL certification for any functional safety rating or aspects of the above devices.
<b>Environment</b>	
Applied standards	EN 60529 EN 61000-6-2 EN 61000-6-4 EN 61131-2
Operating altitude	max. 2000 m
Operating temperature	-25 °C ... +50 °C (up to max. 55 °C) <sup>(2)</sup> (no condensation permitted)
Storage temperature	-25 °C ... +85 °C
Intended environment	for indoor use only
Housing	stainless steel, for DIN rail mounting
Pollution degree	2
Overvoltage category	III
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	$\geq$ 500 V
Weight	625 g
Dimensions (W / H / D in mm)	85 / 127 / 148

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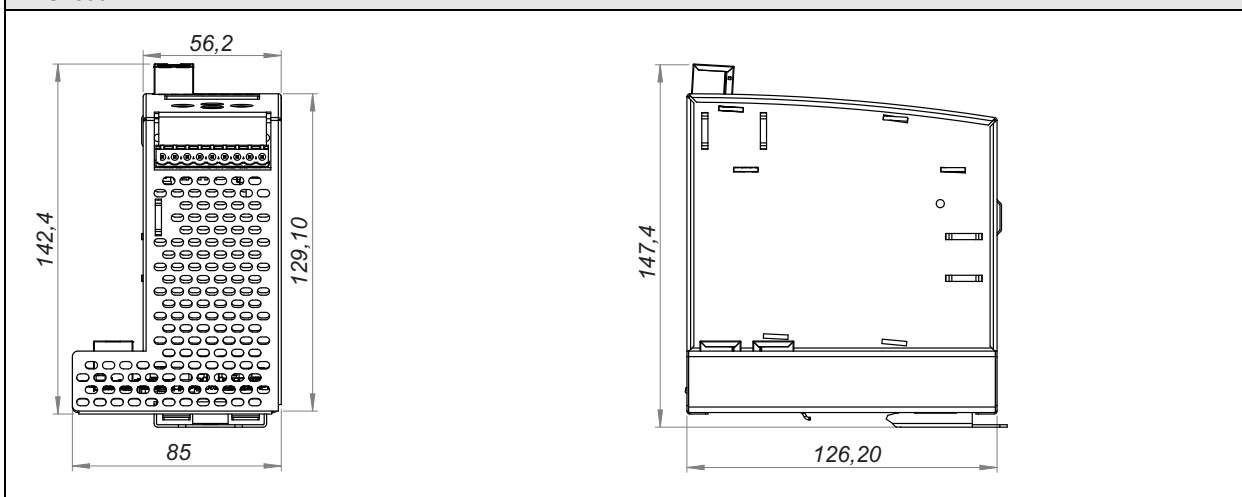
(1) **ASi Power24V**

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.

(2) Maximum ambient operating temperature +50 °C according UL certificate for the use in the USA and Canada.

## Dimensional drawings

BWU4855



## Wiring rules ASi connection

Push-in terminals, 5 poles (pitch 3.5 mm)	
<b>General</b>	
Nominal cross section	1.5 mm <sup>2</sup>
<b>Conductor cross section</b>	
Conductor cross section solid	0.14 ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 ... 1.5 mm <sup>2</sup>
Conductor cross section flexible, with ferrule	without plastic sleeve: 0.25 ... 1.5 mm <sup>2</sup> with plastic sleeve: 0.25 ... 0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded, with TWIN ferrules	–
AWG	26 ... 16
Stripped insulation length	10 mm

## Wiring rules power supply

Push-in terminals, 3 poles (pitch 7.62 mm)	
<b>General</b>	
Nominal cross section	2.5 mm <sup>2</sup>
<b>Conductor cross section</b>	
Conductor cross section solid	0.5 ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.5 ... 2.5 mm <sup>2</sup> (with or without plastic sleeve)
AWG	20 ... 12
Stripped insulation length	10 mm

## ASi-3 PROFINET Gateway in stainless steel

Article no.	BWU4855
Data decoupling integrated in the gateway	•
Current measurement of the ASi circuits	•
Self-resetting adjustable fuses	•
Cost-effective power for 2 ASi networks with 1 power supply	•

### Accessories:

- Chip card, memory capacity 128 kByte (art. no. BW2222)
- Bihl+Wiedemann Suite license - Software for Configuration, Diagnostics and Commissioning (art. no. BW2902)
- Power supplies, e.g.: 30 V Power Supply, 16 A, 1 phase (art. no. BW4221), 30 V Power Supply, 16 A, 3 phases (art. no. BW4222), (further power supply units can be found at [www.bihl-wiedemann.de/en/products/accessories/power-supplies](http://www.bihl-wiedemann.de/en/products/accessories/power-supplies))
- PROFINET Master Simulator Licenses (art. no. BW3035, BW4754)
- Control III, Programming in C (art. no. BW2582)