

ASi-3 BACnet/IP Gateway in Stainless Steel, 2 ASi-3 Masters

OPC UA server

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 coils, 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.
	BACnet/IP OPC UA	ASI-3 compatible	2 ASi networks, 2 ASi-3 Masters	yes, max. 8 A/ ASi network	Ethernet Fieldbus + Ethernet diagnostic	yes	yes	optional	BWU4778

(1) Fieldbus interface

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

BACnet/IP Gateway: interface for a BACnet 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-3 Masters.

(3) Integrated decoupling coils, 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 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 slaves. 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.

(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.	BWU4778
Fieldbus interface	
Type	BACnet/IP acc. EN ISO 16484-5 2 x RJ-45, acc. IEEE 802.3, integrated 2-Port-Switch
Baud rate	100 MBaud
OPC UA interface	OPC UA server + web server
Card slot	Chip card for storage of configuration data
Diagnostic interface	
Type	Ethernet; RJ-45, acc. IEEE 802.3
Baud rate	10/100 MBaud half duplex/full duplex
OPC UA interface	OPC UA server + web server
ASi	
ASi specification	3.0
Number of ASi networks, number of ASi Master	2 ASi circuits, 2ASi-3 Masters
Cycle time	150 μ s * (number of ASi-3 nodes + 2)
Operating voltage	30 V _{DC} (20 ... 31,6 V) (PELV voltage)
Operating current	approx. 250 mA
Current per ASi network	max. 8 A
ASi Power24V capability ⁽¹⁾	yes
Display	
LCD	menu, ASi indication of ASi addresses, error messages in plain text
LED power (green)	power ON
LED net (green)	BACnet communication 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)	configuration mode active
UL-specifications (UL61010)	
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 EN 61131-2
Operating altitude	max. 2000 m
Operating temperature	-25 °C ... +50 °C (up to max. 55 °C) ⁽²⁾ 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 / 126 / 147

(1) ASi Power24V

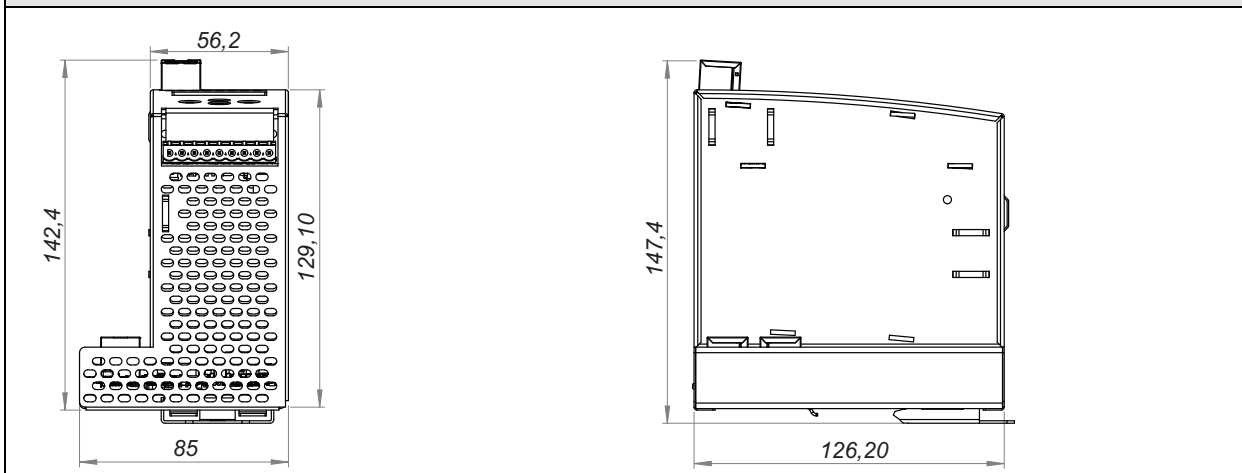
The device can be operated directly on a 24 V (PELV) power supply. The gateway has been optimized with integrated data coupling coils and adjustable self-resetting fuses for safe use of powerful 24 V power supplies.

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

Dimensional drawings

BWU4778



Wiring rules ASi connection

Push-in terminals, 2 /3 /4 poles (pitch 5 mm)	
General	
Nominal cross section	2.5 mm ²
Conductor cross section	
Conductor cross section solid	0.2 ... 2.5 mm ²
Conductor cross section flexible	0.2 ... 2.5 mm ²
Conductor cross section flexible, with ferrule	without plastic sleeve: 0.25 ... 2.5 mm ²
	with plastic sleeve: 0.25 ... 2.5 mm ²
2 conductors with same cross section, stranded, with TWIN ferrules	without plastic sleeve: 0.5 ... 1.5 mm ²
AWG	24 ... 14
Stripped insulation length	10 mm

Wiring rules power supply

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

Article no.	BWU4778
Data decoupling integrated in the gateway	•
Current measurement of the ASi circuits	•
Self-resetting adjustable fuses	•
ASi earth fault monitor distinguishes between ASi cable and sensor cable	•
Cost-effective power for 2 ASi networks with 1 power supply	•

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Accessories:

- Bihl+Wiedemann Suite - 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)