

# ASi-3 BACnet/IP Gateway in Stainless Steel

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 <sup>(1)</sup>	ASi-5/ASi-3	Number of ASi networks, number of ASi Master <sup>(2)</sup>	Integrated decoupling coils, 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.
	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	<b>BWU4778</b>

**(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.

# ASi-3 BACnet/IP Gateway in Stainless Steel

<b>Article no.</b>	<b>BWU4778</b>
<b>Fieldbus interface</b>	
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 (BW4055) for storage of configuration data
<b>Diagnostic interface</b>	
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
<b>ASi</b>	
ASi specification	3.0
Number of ASi networks, number of ASi Master	2 ASi circuits, 2 ASi-3 Masters
Cycle time	150 $\mu$ s * (number of ASi nodes+ 2)
Operating voltage	30 V <sub>DC</sub> (20 ... 31,6 V) (PELV voltage)
Operating current	approx. 250 mA
Current per ASi network	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 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
<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 ... +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	$\geq$ 500 V
Weight	625 g
Dimensions (W / H / D in mm)	85 / 127 / 148

**(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.

# ASi-3 BACnet/IP Gateway in Stainless Steel

## 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

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	•

## 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, 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))