

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 ⁽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.
	BACnet/IP OPC UA	ASi-3 compatible	2 ASi networks, 2 ASi-3 Masters	no, max. 8 A/ ASi network, redundant supply	Ethernet Fieldbus + Ethernet diagnostic	yes	yes	optional	BWU3356

(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 Masters.

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

"no, max. 8 A/ASi network, redundant supply": 1 power supply per ASi network. Gateway is powered in normal operation from one of the two ASi power supplies. Should one ASi power supply fail, switching to the other ASi power supply allows all the diagnostics functions to be maintained and the unaffected ASi network continues to operate.

(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.	BWU3356
Fieldbus Interface	
Type	BACnet/IP acc. EN ISO 16484-5 1 x RJ-45, acc. IEEE 802.3
Baud rate	100 MBaud
OPC UA interface ⁽¹⁾	OPC UA server + web server
Card slot	Chip card for storage of configuration data
Diagnostic Interface	
Type	Ethernet; RJ-45, acc. IEEE 802.3
ASi	
ASi specification	3.0
Cycle time	150 µs * (number of nodes + 2)
Operating voltage	30 V _{DC} (20 ... 31,6 V) (PELV voltage)
Display	
LCD	menu, ASi indication of slave 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 slave programming enabled
LED prj mode (yellow)	configuration mode active
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	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Housing	Stainless Steel, for DIN rail mounting
Protection category	IP20
Tolerable loading referring to humidity	according to EN 61131-2
Tolerable loading referring to impacts and vibrations	according to EN 61131-2
Voltage of insulation	≥500 V
Weight	500 g
Dimensions (W / H / D in mm)	85 / 120 / 93

⁽¹⁾ BWU3356 from Ident. no. ≥17896.

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Article no.	Operating current		
	Master power supply, ca. 200 mA out of ASi circuit	Master power supply, max. 200 mA out of AS-i circuit 1 (ca. 70 mA ... 200 mA), max. 200 mA out of AS-i circuit 2 (ca. 70 mA ... 200 mA); in sum max. 270 mA	Cost-effective power for 2 ASi networks with 1 power supply, approx. 250 mA (PELV voltage)
BWU3356	-	•	-

Article no.	BWU3356
Data decoupling integrated in the gateway	-
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	•
Current measurement of the ASi circuits	-
Self-resetting adjustable fuses	-
ASi earth fault monitor distinguishes between ASi cable and sensor cable	-
1 power supply per ASi network	•

Accessories:

- Bihl+Wiedemann Suite - Software for Configuration, Diagnostics and Commissioning (art. no. BW2902)
- Power supplies, e.g.: ASi power supply, 4 A (art. no. BW1649), ASi power supply, 8 A (art. no. BW1997)
(further power supply units can be found at www.bihl-wiedemann.de/en/products/accessories/power-supplies)