

ASi-3 DeviceNet Gateway in Stainless Steel

DeviceNet to ASi bridge

ASi Earth Fault Detector integrated

Recognition of duplicate ASi addresses

ASi Noise Detector integrated



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⁾	Recognition of duplicate ASi addresses ⁽⁴⁾	ASi fault detector ⁽⁵⁾	Programming in C ⁽⁶⁾	Article no.
	DeviceNet	ASi-3 compatible	2 ASi networks, 2 ASi-3 Masters	yes, max. 4 A/ASi network	yes	yes	no	BWU1820

(1) Fieldbus interface

Communication interface between fieldbus and gateway: interfaces for standardized fieldbus systems in industrial automation.
DeviceNet ASi Gateway: interface for a DeviceNet fieldbus

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

"Single Master": 1 ASi network, 1 ASi-3 Master;
"Double Master": 2 ASi networks, 2 ASi-3 Masters.

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

"yes, max. 4 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.

"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.

"no, max. 8 A/ASi network": 1 power supply per ASi network.

(4) Recognition of duplicate ASi addresses

Detects whether the same address has been assigned to two ASi nodes. Frequent error when using a hand held addressing device.

(5) ASi fault detector

Checks the ASi line for interference effects such as noise, external voltages, etc.

(6) Programming in C

Using a C-program offers the possibility to run mini-PLC functions with a gateway.

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Article no.	BWU1820
Interface	
Interface	DeviceNet interface (5-pin plug) RS 232 diagnostic interface
Baudrate	125 kBaud, 250 kBaud, 500 kBaud
ASi	
ASi specification	3.0
Cycle time	150µs * (number of ASi-3 nodes + 2)
Operating voltage	30 V _{DC} (20 ... 31,6 V)
Display	
LCD	displaying ASi addresses and error messages
LED power (green)	voltage ON
LED ser active (green)	module/network-status (MNS)
LED config error (red)	configuration error
LED U ASi (green)	ASi voltage OK
LED ASi active (green)	ASi in normal operation
LED prg enable (green)	automatic address programming enabled
LED prj mode (yellow)	configuration mode active
UL-specifications (UL508)	
Applied standards	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.
Umwelt	
Applied standards	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
Pollution degree	2
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	590 g
Dimensions (W / H / D in mm)	85 / 120 / 83

Article no.	Operating current		
	Master power supply, ca. 200 mA out of ASi circuit	Master power supply, max. 200 mA out of ASi circuit 1 (ca. 70 mA ... 200 mA), max. 200 mA out of ASi 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)
BWU1820	-	-	•

Pin assignment:

	Signal	Color
1	V+	red
2	CAN_H	white
3	Shield	n/a
4	CAN_L	blue
5	V-	black

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Accessories:

- Software "ASi Control Tools" with serial transmission cord for connection of the ASi Master (art. no. BW1602)
- DeviceNet Master Simulator with USB interface (art. no. BW1420)
- Data transmission cord for ASi Gateways with CAN interface (art. no. BW1226)
- 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)