

ASi-3 CANopen Gateway in Stainless Steel

Recognition of duplicate ASi addresses

ASi Earth Fault Detector integrated

ASi Noise Detector integrated



(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⁾	Article no.
	CANopen	ASi-3 compatible	2 ASi networks, 2 ASi-3 Masters	no, max. 8 A/ ASi network, redundant supply	RS 232	yes	yes	BWU1822
	CANopen	ASi-3 compatible	1 ASi network, 1 ASi-3 Master	no, max. 8 A/ ASi network	RS 232	yes	yes	BWU1821

(1) **Fieldbus interface**

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

CANopen ASi Gateway: interface for a CANopen 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) **Diagnostic and configuration interface**

"RS 232": Access to ASi master and safety monitor with Bihl+Wiedemann proprietary software by using an adapter cable via RS 232 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, ...

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Article no.	BWU1821	BWU1822
Fieldbus Interface		
Type	CANopen (5-pin plug), RS 232 diagnostic interface	
Baud rates	10 to 1000 Kbaud	
CANopen features	extended boot-up, minimum boot-up, life guarding COB ID Distribution: DBT, SDO, Default Node ID Distribution: SDO, Switch No of PDOs: up to 35 Rx, 35Tx PDO Modes: async, cyclic, acyclic Device Specification: CiA DS-301	
Diagnostic Interface		
Type	RS 232	
ASi		
ASi specification	3.0	
Cycle time	150 μ s * (number of ASi-3 nodes + 2)	
Operating voltage	30 V _{DC} (20 ... 31,6 V) (PELV voltage)	
Display		
LCD	menu, ASi indication of addresses, error messages in plain text	
LED power (green)	power ON	
LED ser.active (green/red)	CANopen 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)	in configuration mode	
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 62026-2, EN 61000-6-2, EN 61000-6-4, EN 50581 EN 60529	
Operating altitude	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 impacts and vibrations	acc. EN 61131-2	
Maximum tolerable shock and vibration stress	acc. EN 61131-2	
Voltage of insulation	≥ 500 V	
Dimensions (W / H / D in mm)	85 / 120 / 83	
Weight	520 g	

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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 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)
BWU1821	•	–	–
BWU1822	–	•	–

Pin assignment:

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

Accessories:

- Software "ASi-Control-Tools" with serial transmission cord for connection of the ASi Master (art. no. BW1602)
- CANopen master simulator (art. no. BW1453)
- Data transmission cord for ASi Gateways with CAN interface (art. no. BW1226)
- 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)