

24 Volt ASi Gateways in Stainless Steel

24 Volt ASi:

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

Available fieldbus interfaces:

- PROFIBUS
- PROFINET IO: IRT-technology and 1 integrated Switch
- EtherNet/IP + Modbus/TCP in one device
- EtherCAT
- POWERLINK
- CC-Link



(figure similar)

OPC UA server

Integrated webserver for simplified diagnostics

Recognition of duplicate ASi addresses

ASi Noise Detector integrated



Figure	Type	Model	Fieldbus interface ⁽¹⁾	Number of ASi networks, number of ASi Master ⁽²⁾	Recognition of duplicate ASi addresses ⁽³⁾	ASi fault detector ⁽⁴⁾	Programming in C ⁽⁵⁾	Article no.
	24 Volt ASi Gateway	Gateway	PROFIBUS	1 ASi network, 1 ASi Master	yes	yes	no	BWU3053
	24 Volt ASi Gateway	Gateway	PROFINET, OPC UA	1 ASi network, 1 ASi Master	yes	yes	no	BWU3760
	24 Volt ASi Gateway	Gateway	EtherNet/IP + Modbus TCP, OPC UA	1 ASi network, 1 ASi Master	yes	yes	no	BWU3822
	24 Volt ASi Gateway	Gateway	EtherCAT	1 ASi network, 1 ASi Master	yes	yes	no	BWU3058
	24 Volt ASi Gateway	Gateway	POWERLINK	1 ASi network, 1 ASi Master	yes	yes	no	BWU3312
	24 Volt ASi Gateway	Gateway	CC-Link	1 ASi network, 1 ASi Master	yes	yes	no	BWU3051

⁽¹⁾ **Fieldbus interface**

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

OPC UA server: interface for the OPC UA communication.

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- (2) **Number of ASi networks, number of ASi Master**
"Single Master": 1 ASi network, 1 ASi Master.
- (3) **Recognition of duplicate ASi addresses**
Detects whether the same address has been assigned to two ASi slaves. Frequent error when using a handheld addressing device.
- (4) **ASi fault detector**
Checks the ASi line for interference effects such as noise, external voltages, ...
- (5) **Programming in C**
Using a C-program offers the possibility to run mini-PLC functions with a gateway.

Article no.	BWU3053	BWU3760	BWU3822	BWU3058	BWU3312	BWU3051
Interface						
Fieldbus interface	PROFIBUS (RS 485)	PROFINET (RJ-45)	EtherNet/IP + Modbus TCP (RJ-45)	EtherCAT (RJ-45)	POWERLINK (RJ-45)	CC-Link (screw terminal blocks)
	<ul style="list-style-type: none"> • acc. to IEC 61158 / IEC 61784-1 • imaging of the ASi Slaves as I/O of the PROFIBUS • complete diagnosis and configuration via the DP Master 	<ul style="list-style-type: none"> • 2 x RJ-45, integrated 2-Port-Switch • IRT capability • Conformance Class B • integrated switch complies with Class C (IRT capability) 	<ul style="list-style-type: none"> • 2 x RJ-45, integrated 2-Port-Switch • Ethernet + Modbus TCP acc. to IEEE 802.3 	<ul style="list-style-type: none"> • 2 x RJ-45, integrated 2-Port-Switch • acc. to IEEE 802.3 	<ul style="list-style-type: none"> • 2 x RJ-45 Ethernet acc. to IEEE 802.3 • integrated 2-Port-Switch • POWERLINK acc. to IEC 61748-2 and IEC 61158 	<ul style="list-style-type: none"> • acc. to CC-Link specification • remote device • 2-4 occupied stations (depending on operating mode)
OPC UA interface	–	OPC UA server + web server		–	–	–
Baud rates	9,6 KBaud ... 12 MBaud, automatic recognition	100 MBaud	10/100 MBaud	100 MBaud		156 KBaud ... 10 MBaud
Function	–	<ul style="list-style-type: none"> • PROFINET IO Device • Media Redundancy Protocol (MRP) • Shared Device 	<ul style="list-style-type: none"> • Device Level Ring (DLR) (Ethernet/IP only) 	–	–	–
Card slot	chip card for storage of configuration data					
ASi						
ASi specification	3.0					
Cycle time	150 µs * (number of slaves + 2)					
Operating voltage	24 V _{DC} (20 ... 31,6 V) (PELV voltage)					
Operating current	approx. 250 mA					
Current per ASi network	max. 4 A					
Length of ASi cable	with 24 V standard power supply: max. 50 m with 30 V ASi power supply: max. 100 m					

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Display						
LCD	menu, ASi indication of slave addresses, error messages in plain text					
LED power (green)	power ON					
Fieldbus	LED PROFIBUS	LED PROFINET	LED net	LED status	LED POWERLINK	LED CC-Link
	green: PROFIBUS communication active	green: PROFINET communication active red: no PROFINET communication	green: EtherNet communication active	green: EtherCAT communication active	green: POWERLINK communication active	green: CC-Link 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 $\leq 30 V_{DC}$ 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 61131-2 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					
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	500 g					
Dimensions (W / H / D in mm)	75 / 120 / 83	85 / 120 / 83				

Article no.	BWU3053, BWU3760, BWU3822, BWU3058, BWU3312, BWU3051
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 fuses	•
Adjustable fuses	–
ASi earth fault monitor distinguishes between ASi cable and sensor cable	–
In version 1 gateway, 1 power supply for 2 ASi circuits: only 1 Gateway + 1 ASi power supply for 2 ASi networks	•

Accessories:

- Diagnostic Software (art. no. BW2902)
- PROFINET Master Simulator (art. no. BW3035, BW3057)
- PROFIBUS Master Simulator (art. no. BW1131, BW1257)
- 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)