

Safety Drive Controller, openSAFETY over POWERLINK

Safety Drive Controller

POWERLINK

- integrated hub

openSAFETY over POWERLINK

Safe Link

OPC UA interface and REST API for IIoT applications

Integrated web server for simple diagnostics and maintenance


Applications up to category 4/PLe/SIL 3

Chip card for storage of configuration and additional data



(figure similar)



Figure	Type	Inputs Safety, SIL 3, cat. 4	Inputs Safety, expandable to	Outputs Safety, SIL 3, cat. 4	Safety outputs, independent according to SIL 3, expandable to	Safety communication	Number of ASi networks, number of ASi Master	1 power supply, 1 gateway for 2 ASi networks, inexpensive power supplies	Diagnostic and configuration interface ⁽¹⁾	Art. no.
	Safety Drive Controller	–	–	–	–	openSAFETY over POWERLINK + Safe Link	–	30 V, max. 8 A	Ethernet diagnostic	BWU4021

(1) **Diagnostic and configuration interface**

"Ethernet diagnostic": Access to ASi master and safety monitor via Bihl+Wiedemann proprietary software over Ethernet diagnostics interface.

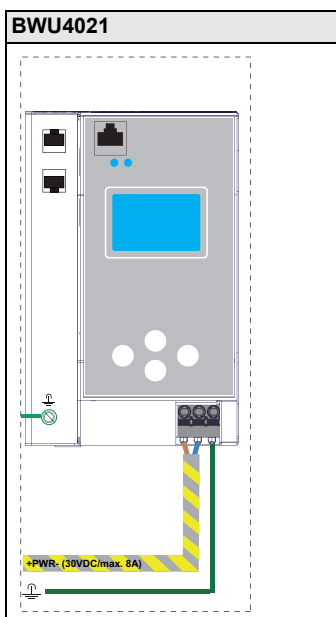
The latest version of the device description file of the gateway is available in the "Downloads" section of the respective device.

Article no.	BWU4021
Fieldbus interface	
Type	POWERLINK 2 x RJ-45, integrated 2-Port-Hub
Baud rates	10/100 MBaud
Safety communication	openSAFETY
Max. number of Safety nodes	45
IT interface	–
Card slot	chip card (BW4785) for storage of configuration and additional data
Diagnostic interface	
Type	Ethernet RJ-45 according to IEEE 802.3
Baud rate	10/100 MBaud half-duplex or full-duplex
Safety communication	Safe Link
IT interface	OPC UA server, web server, REST API
Mode	
Operating voltage	30 V _{DC} (20 ... 31,6 V) (PELV voltage)
Operating current	ca. 300 mA

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Article no.	BWU4021
Display	
LCD	menu, indication of error messages in plain text
LED POWERLINK (green)	POWERLINK communication activ
LED power (green)	power on
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	
Angewandte Normen	EN 62026-2 EN 60529 EN 61000-6-2 EN 61000-6-4 EN 61131-2 EN 62061, SIL 3 EN 61508, SIL 3 EN ISO 13849-1, Performance-Level e EN ISO 13849-2
Operating altitude	max. 5000 m
Ambient 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
Maximum tolerable shock and vibration stress	according to EN 61131-2
Voltage of insulation	$\geq 500 V$
Weight	800 g
Dimensions (W / H / D in mm)	85 / 120 / 106

Connections: Gateway + Safety Monitor:



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Accessories:

- Chip card for storage of configuration and additional data (art. no. BW4785)
- Bihl+Wiedemann Safety Suite - Safety Software for Configuration, Diagnostics and Commissioning (art. no. BW2916)
- 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)