

AS-i 3.0 EtherCAT Gateways in Stainless Steel

EtherCAT to AS-i 1 / 2 AS-i 3.0 Master

Recognition of Duplicate AS-i addresses

AS-i Earth Fault Detector integrated

AS-i Noise Detector integrated



(figure similar)



Figure	Type	Art	Fieldbus interface ⁽¹⁾	Number of AS-i networks, number of AS-i Master ⁽²⁾	1 power supply, 1 gateway for 2 AS-i networks, inexpensive power supplies ⁽³⁾	Diagnostic and configuration interface ⁽⁴⁾	Recognition of duplicate AS-i addresses ⁽⁵⁾	AS-i fault detector ⁽⁶⁾	Article no.
	EtherCAT AS-i	Gateway	EtherCAT	2 AS-i networks, 2 AS-i Masters	yes, max. 4 A/AS-i network	Ethernet diagnostic	yes	yes	BWU2720
	EtherCAT AS-i	Gateway	EtherCAT	2 AS-i networks, 2 AS-i Masters	no, max. 8 A/AS-i network, redundant supply	RS 232	yes	yes	BWU2163
	EtherCAT AS-i	Gateway	EtherCAT	1 AS-i Kreis, 1 AS-i Master	no, max. 8 A/AS-i network	RS 232	yes	yes	BWU2162

(1) Fieldbus interface

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

PROFINET AS-i Gateway: interface for a PROFINET fieldbus

(2) Number of AS-i networks, number of AS-i Master

"Single Master": 1 AS-i network, 1 AS-i Master.

"Double Master": 2 AS-i networks, 2 AS-i Masters.

(3) 1 power supply, 1 gateway for 2 AS-i networks, inexpensive power supplies

"yes, max. 4 A/AS-i network": Cost-effective power for 2 AS-i 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/AS-i network, redundant supply": 1 power supply per AS-i network. Gateway is powered in normal operation from one of the two AS-i power supplies. Should one AS-i power supply fail, switching to the other AS-i power supply allows all the diagnostics functions to be maintained and the unaffected AS-i network continues to operate.

"no, max. 8 A/AS-i network": 1 power supply per AS-i network.

(4) Diagnostic and configuration interface

"Ethernet fieldbus": Access to AS-i Master and Safety Monitor with Bihl+Wiedemann software by using the 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 AS-i addresses

Detects whether the same address has been assigned to two AS-i slaves. Frequent error when using a handheld addressing device.

(6) AS-i fault detector

Checks the AS-i line for interference effects such as noise, external voltages, ...

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Article no.	BWU2162 / BWU2163 / BW2720
Interface	
EtherCAT interface	according to IEEE 802.3 (RJ-45 connector)
Baud rates	100 MBaud
AS-i	
AS-i specification	3.0
AS-i cycle time	150µs * (number of slaves + 2)
Operating voltage	30 V _{DC} (20 ... 31,6 V)
Display	
LCD	displaying slave addresses and error messages
LED power (green)	power on
LED ser active (green)	EtherCAT-Network active
LED config error (red)	configuration error
LED U AS-i (green)	AS-i voltage OK
LED AS-i active (green)	AS-i normal operation active
LED prg enable (green)	automatic address programming enabled
LED prj mode (gelb)	master is in configuration mode
Environment	
Applied standards	EN 61 000-6-2 EN 61 000-6-4
Housing	the master is in configuration mode
Operating temperature	0°C ... +55°C
Storage temperature	-25°C ... +85°C
Pollution degree	2
Protection class IEC 60 529	IP20
Tolerable loading referring to humidity	according to EN 61131-2
Maximum tolerable shock and vibration stress	EN 61 131-2
Voltage of insulation	≥ 500V
Dimensions (W / H / D) in mm	85 / 120 / 83
Weight	500g

Art. no.	Operating current		
	Master power supply approx. 200mA out of AS-i circuit	Master power supply, max. 200mA out of AS-i circuit 1 (approx. 70mA ... 200mA) max. 200mA out of AS-i circuit 2 (approx. 70mA ... 200mA)	Version "1 gateway, 1 power supply for 2 AS-i circuits", approx. 250mA (PELV supply)
BWU2162	•	–	–
BWU2163	–	•	–
BWU2720	–	–	•

BW2163:

- Redundant power supply out of AS-i:
all fundamental functions of the device remain available even in case of power failure in one of the two AS-i networks

BW2720

- in version "1 gateway, 1 power supply for 2 AS-i circuits":
only 1 gateway + 1 AS-i power supply for 2 AS-i networks

Accessories:

- Software "AS-i Control Tools" with serial cable for AS-i master in stainless steel (art. no. BW1602)
- Cross-Link cable (art. no. BW1304)
- Power supplies, e.g.: AS-i power supply, 4 A (art. no. BW1649), AS-i power supply, 8 A (art. no. BW1997)
(further power supply units can be found at www.bihl-wiedemann.de/en/products/accessories/power-supplies)