ASi-5/ASi-3 Function and EMC-Test Master, 1 ASi-5/ASi-3 master

Bihl+Wiedemann

For programming, developing and testing of ASi-3 nodes

Compatible with all ASi generations

ASi-5 master and ASi-3 master in one device

Ethernet interface

OPC UA interface and REST API for IIoT applications

Integrated web server for simple diagnostics and maintenance

Suitable for SAP4, SAP5, A^{2}SI and ASI4U

ASi EMC Tools software included in scope of delivery (requires ASIMON360 resp. ASi Control Tools360)

(figure similar)

The ASi-3 Function and EMC-Test Master with Ethernet interface can be operated in 3 different modes:

- As a tool for programming of the ASi-3 node ICs SAP4, SAP5, A^{2}SI and ASI4U
- As a means to perform function and EMC tests which are necessary for every development of an ASi-3 node (EMC test mode). The use of ASi EMC Tools software (included) requires the installation of ASIMON360 (BW2916) or ASi Control Tools360 (BW2902).
- As a standard ASi Master according to ASi specifications 3.0 and 5.

Figure	Type	Model	Interface	Number of ASi networks, number of ASi Master [1]	Integrated decoupling, ASi current measurement in the gateway [2]	Article no.
	Test Master ASi-5/ASi-3	Gateway	Ethernet	1 ASi network, 1 ASi-5/ASi-3 master	yes, max. 4 A/ ASi network	**BWU4017**

[1] **Number of ASi networks, number of ASi Master**
"Single Master": 1 ASi network, 1 ASi-5/ASi-3 Master.

[2] **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.

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Article no.	BWU4017
Fieldbus interface	
Type	• 2 x RJ-45, integrated 2-Port-Switch • Ethernet according to IEEE 802.3
Baud rate	100 MBaud
IT interface	REST API
Card slot	Chip card (512 KB) for storage of configuration data
ASi	
ASi specification	ASi-3 + ASi-5
Cycle time	**Cycle time ASi-3 (variable):** 150 µs * (number of ASi-3 nodes + 2)
	Cycle time ASi-5 (constant): 1,27 ms for 384 bits input data + 384 bits output data
Operating voltage	24 V_{DC} (20 ... 31,6 V) (PELV voltage)
Operating current	ca. 250 mA
Current per ASi network	max. 4 A
ASi Power24V capability [1]	yes
Length of ASi line	with supply via 24 V power supply: max. 50 m with supply via 30 V power supply: max. 100 m for ASi-3 / max. 200 m for ASi-5
Display	
LCD	menu, indication of ASi addresses, error messages in plain text
LED power (green)	power ON
LED ser.active (green)	Ethernet interface 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 61131-2 EN 60529 EN 61000-6-2 EN 61000-6-4
Operating altitude	max. 5000 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	≥500 V
Weight	500 g
Dimensions (W / H / D in mm)	85 / 120 / 83
Scope of delivery	
• BWU4017 ASi-5/ASi-3 Function and EMC Test Master, 1 ASi-5/ASi-3 master • AS-Interface EMC Tools software for Windows (***Download via Bihl+Wiedemann website***)	

[1] **ASi Power24V**
The device can be operated directly on a 24 V (PELV) power supply. The gateway has been optimized with integrated data coupling coils and adjustable self-resetting fuses for safe use of powerful 24 V power supplies.

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Accessories:

- Chip card, memory capacity 512 kB (art. no. BW4055)
- Bihl+Wiedemann Safety Suite - Safety Software for Configuration, Diagnostics and Commissioning (art. no. BW2916)
- Bihl+Wiedemann Suite - Software for Configuration, Diagnostics and Commissioning (art. no. BW2902)
- 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*)
- DLL driver (art. no. 1356)

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