

## AS-i 3.0 Master with serial interface


1 AS-i Master

RS 232 interface

Graphical display

B+W standard protocol for communication with the host



Figure	Type	Model	Fieldbus interface <sup>(1)</sup>	Number of AS-i networks, number of AS-i Master <sup>(2)</sup>	1 power supply, 1 gateway for 2 AS-i networks, inexpensive power supplies <sup>(3)</sup>	Recognition of duplicate AS-i addresses <sup>(4)</sup>	AS-i fault detector <sup>(5)</sup>	Programming in C <sup>(6)</sup>	Article no.
	RS 232 AS-i	Gateway	RS 232	1 AS-i network, 1 AS-i Master	no, max. 8 A/AS-i network	no	yes	no	BWU1955

(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) **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.

(5) **AS-i fault detector**

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

(6) **Programming in C**

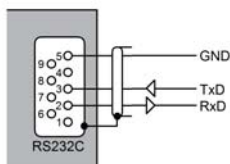
Using a C-program offers the possibility to run mini-PLC functions with a gateway.

# AS-i 3.0 RS 232 Master in Stainless Steel

<b>Article no.</b>	<b>BWU1955</b>
<b>Interface</b>	
Interface	RS 232 Interface
Baud rate	1200, 2400, 4800, 9600, 19200, 38400 oder 57600 Baud, automatic recognition
<b>AS-i</b>	
AS-i specification	3.0
Cycle time	150 $\mu$ s * (number of slaves + 2)
Operating voltage	30 V <sub>DC</sub> (20 ... 31,6 V) (PELV voltage)
<b>Display</b>	
LCD	menu, AS-i indication of slave addresses, error messages in plain text
LED power (green)	power ON
LED ser active (green)	RS- 232 communication active
LED config error (red)	configuration error
LED U AS-i (green)	AS-i voltage o.k.
LED AS-i active (green)	AS-i normal operation o.k.
LED prg enable (green)	automatic address programming enabled
LED prj mode (yellow)	in configuration mode
<b>UL-specifications (UL508)</b>	
External protection	An isolated source with a secondary open circuit voltage of $\leq 30$ V <sub>DC</sub> 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.
<b>Environment</b>	
Applied standards	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
Protection category	IP20
Tolerable loading referring to impacts and vibrations	according to EN 61131-2
Voltage of insulation	$\geq 500$ V
Weight	460 g
Dimensions (W / H / D in mm)	75 / 120 / 83

Article no.	Operating current		
	Master power supply, ca. 200 mA out of AS-i circuit	Master power supply, max. 200 mA out of AS-i circuit 1 (ca. 70 mA ... 200 mA), max. 200 mA out of AS-i circuit 2 (ca. 70 mA ... 200 mA); in sum max. 270 mA	Version „1 gateway, 1 power supply for 2 AS-i networks“, approx. 250 mA (PELV voltage)
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## Pin assignment:



**Accessories:**

- Software for diagnostics, service approval and measurements (art. no. BW2902)
- 24 V to 30 V AS-i power supply 2 A (art. no. BW1760)
- D-sub-data cable 9-pin, 1,8 m (art. no. BW1058)
- 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](http://www.bihl-wiedemann.de/en/products/accessories/power-supplies))