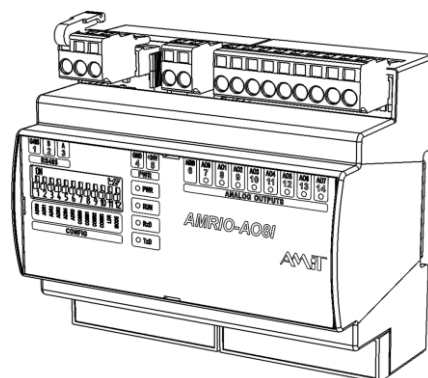


# AMRIO-AO8I

Analogue outputs extension module

- **Module with 8 analogue current outputs**
- **Outputs without galvanic isolation**
- **MODBUS RTU / ARION (RS485) communication**
- **Possibility of user programming**
- **Mounting on a DIN rail**
- **Power supply 24 V DC**



## TECHNICAL DATA

<b>Outputs</b>	8
Output current	0 mA to 20 mA DC
Maximum load impedance	500 Ω
Converter resolution	12 bits
Setting error	< 0.3 % FS <sup>1)</sup>
Common conductor	AGND <sup>2)</sup>
Galvanically isolated outputs	No
<b>Communication</b>	RS485
Galvanically isolated line	Yes <sup>3)</sup>
Line overvoltage protection	Transil 600 W
Communication speeds	9,600 bps to 115,200 bps
Number of modules in the network / segment	63
<b>Power supply</b>	19.2 V DC to 28.8 V DC
Consumption (without outputs)	Max. 24 mA at 24 V DC
<b>Other</b>	
Connection	Spring-loaded connectors WAGO 231
Ingress protection rate	IP20
Operating temperature range	-20 °C to 70 °C
Maximum ambient humidity	< 95 % non-condensing
Mounting	On a 35 mm DIN rail
Weight	0.22 kg
Dimensions (w × h × d)	(106 × 101 × 62) mm
Programming	DetStudio / EsiDet

<sup>1)</sup> FS means a mistake from the full output scale („Full Scale“).

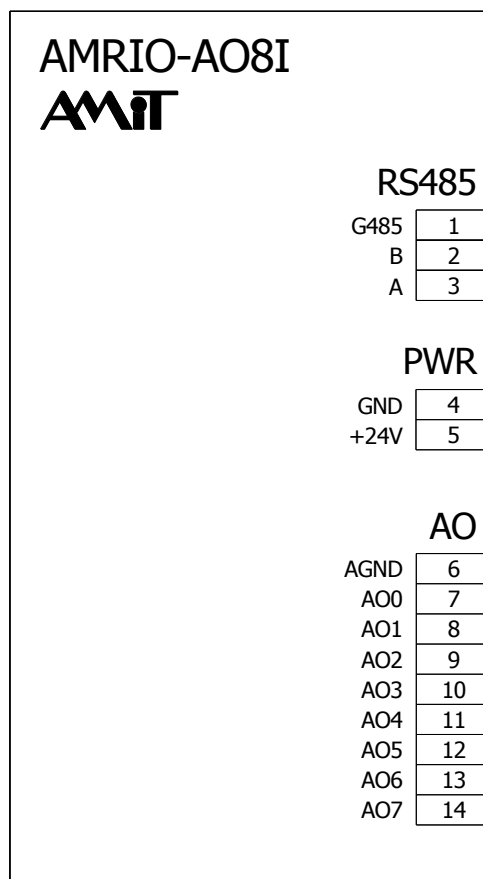
<sup>2)</sup> AGND terminal is internally connected to the module power supply connector GND terminal.

<sup>3)</sup> Isolation strength 500 V AC, galvanic isolation must not be used for separation of safe parts from dangerous parts.

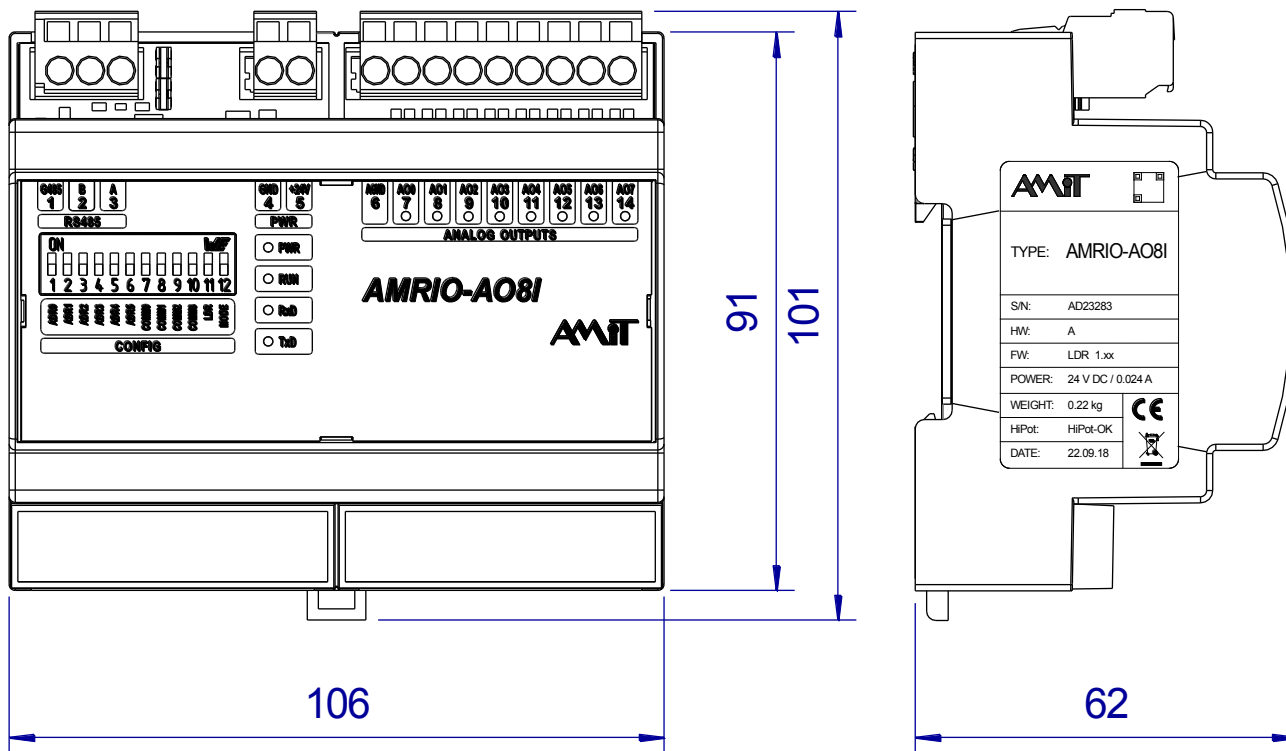
## ORDERING INFORMATION

<b>AMRIO-AO8I</b>	Module with 8 analogue current outputs, WAGO connectors
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## RECOMMENDED DRAWING SYMBOL



## MECHANICAL DIMENSIONS



# AMRIO-AO8I

Analogue outputs extension module

## DESCRIPTION OF TERMINALS

Terminal	Signal	Significance	Terminal	Signal	Significance
1	G485	RS485, ground	8	AO1	Output 1
2	B	RS485, signal B	9	AO2	Output 2
3	A	RS485, signal A	10	AO3	Output 3
4	GND	Power supply, ground	11	AO4	Output 4
5	+24V	Power supply, +24 V DC	12	AO5	Output 5
6	AGND	Analogue ground	13	AO6	Output 6
7	AO0	Output 0	14	AO7	Output 7

## RS485 JUMPERS

Jumpers	Significance
Fitted	Terminal station – idle states and terminations are active.
Not fitted	Intermediate station – idle states and terminations are inactive.

Note: Jumpers are always fitted simultaneously.

Procedures of setting communication parameters, including the list of supported MODBUS functions and mapping of signals in the ARION protocol, are included in the operation manual for this module ([amrio-ao8i\\_g\\_en\\_xxx.pdf](#)).

The **AMRIO-AO8I** module with an application loaded during its manufacture can be used as a fully compatible substitute for modules **DM-AO8I** and **DMM-AO8I**.

Data in this datasheet is informative only. Binding detailed information can be found in the operation manual ([amrio-ao8i\\_g\\_en\\_xxx.pdf](#)). Documentation and examples are available at [amitautomation.com](http://amitautomation.com).