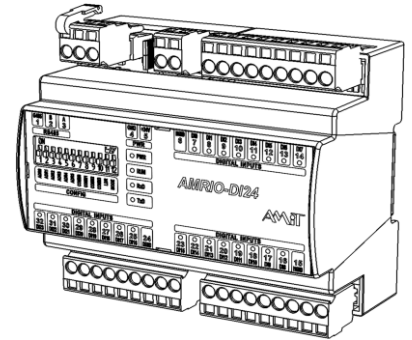


AMRIO-DI24

Extension module with digital inputs

- **Module with 24 digital inputs 24 V DC**
- **Inputs with galvanic isolation in sets of 8**
- **MODBUS RTU / ARION (RS485) communication**
- **Possibility of user programming**
- **DIN rail mounting**
- **Power supply 24 V DC**



TECHNICAL DATA

Inputs	3 × 8
Common conductor	1xGND ¹⁾
Input type	24 V DC
Input current	2.94 mA ±5 %
Max. counter frequency	80 Hz, duty cycle 1:1
Galvanic isolation	Yes ²⁾
Communication	RS485
Galvanically isolated line	Yes ³⁾
Line overvoltage protection	Transil 600 W
Communication speeds	9,600 bps to 115,200 bps
Number of modules in the network / segment	63
Power supply	19.2 V DC to 28.8 V DC
Consumption (without outputs)	Max. 24 mA at 24 V DC
Other	
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

¹⁾ The letter x represents the number of the output group (0, 1 and 2).

²⁾ Isolation strength 2,500 V AC, galvanic isolation must not be used for separation of safe parts from dangerous parts.

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

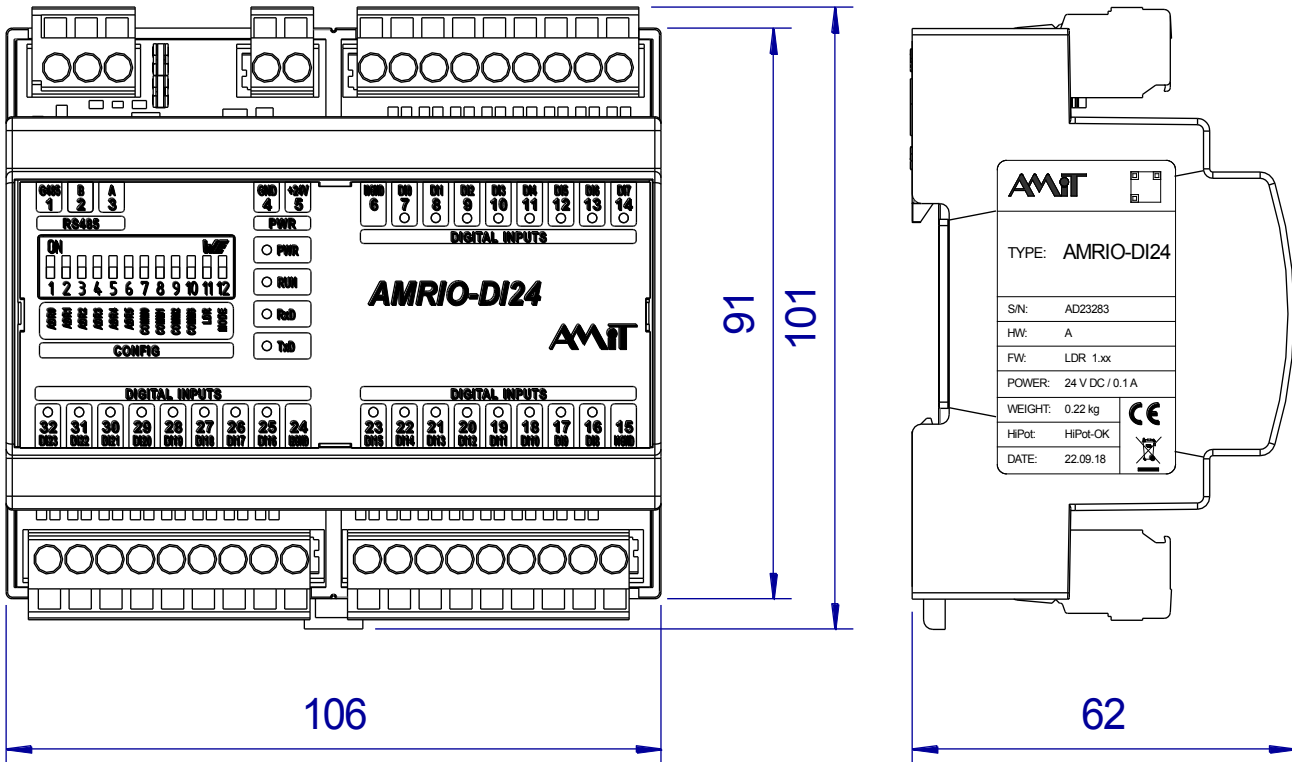
ORDERING INFORMATION

AMRIO-DI24	Module with 24 digital inputs, WAGO connectors
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RECOMMENDED DRAWING SYMBOL

AMRIO-DI24	
AMIT	
DI2	
32	DI23
31	DI22
30	DI21
29	DI20
28	DI19
27	DI18
26	DI17
25	DI16
24	I2GND
DI1	
23	DI15
22	DI14
21	DI13
20	DI12
19	DI11
18	DI10
17	DI9
16	DI8
15	I1GND
RS485	
G485	1
B	2
A	3
PWR	
GND	4
+24V	5
DI0	
I0GND	6
DI0	7
DI1	8
DI2	9
DI3	10
DI4	11
DI5	12
DI6	13
DI7	14

MECHANICAL DIMENSIONS



AMRIO-DI24

Extension module with digital inputs

DESCRIPTION OF TERMINALS

Terminal	Signal	Significance	Terminal	Signal	Significance
1	G485	RS485, ground	17	DI9	Input 9
2	B	RS485, signal B	18	DI10	Input 10
3	A	RS485, signal A	19	DI11	Input 11
4	GND	Power supply, ground	20	DI12	Input 12
5	+24V	Power supply, +24 V DC	21	DI13	Input 13
6	I0GND	Ground for inputs DI0 to DI7	22	DI14	Input 14
7	DI0	Input 0	23	DI15	Input 15
8	DI1	Input 1	24	I2GND	Ground for inputs DI16 to DI23
9	DI2	Input 2	25	DI16	Input 16
10	DI3	Input 3	26	DI17	Input 17
11	DI4	Input 4	27	DI18	Input 18
12	DI5	Input 5	28	DI19	Input 19
13	DI6	Input 6	29	DI20	Input 20
14	DI7	Input 7	30	DI21	Input 21
15	I1GND	Ground for inputs DI8 to DI15	31	DI22	Input 22
16	DI8	Input 8	32	DI23	Input 23

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-di24_g_en_xxx.pdf](#)).

The **AMRIO-DI24** module with the application loaded during its manufacture can be used as a fully compatible substitute for modules **DM-DI24** and **DMM-DI24**.

Data in this datasheet is informative only. Binding detailed information can be found in the operation manual ([amrio-di24_g_en_xxx.pdf](#)). Documentation and examples are available at amitautomation.com.