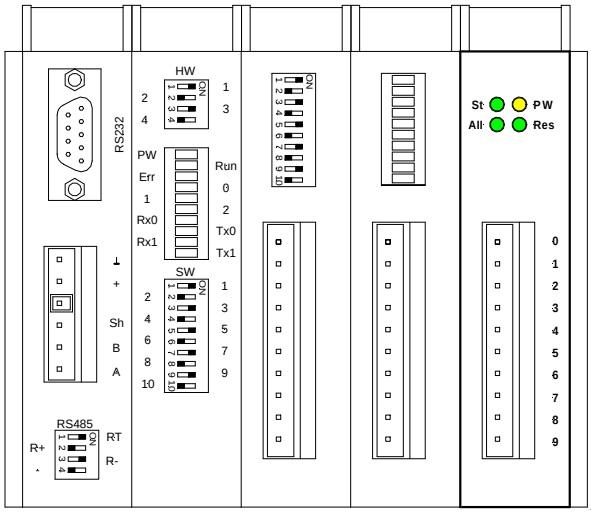
AD-GAI8

8 Galvanically Separated Analogue Inputs ±10 V, ±20 mA

- **8 galvanically separated analogue inputs with internal jumpers for individual configuration**
- **Input ranges ±10 V, ±20 mA**
- **15 bits conversion + sign**
- **Overvoltage protection**
- **Conversion status indication**
- **Self-stacking connection to the AD-CPU167 unit, DIN rail mounting**



TECHNICAL DATA

Number of inputs	8 with common analogue ground
Galvanic separation of inputs	Yes *)
A/D converter resolution	15 bits + sign
Signal integration time	20 ms
1 channel conversion time	120 ms
Input ranges / 1 bit resolution Voltage input range / 1 bit resolution Current input range / 1 bit resolution	Individually adjustable U/I ±10 V / 0.305 mV ±20 mA / 0.61 μA
U/I input resistance	1 MOhm / 249 Ohm
Accuracy of amplification and conversion	4 LSB
Linearity	2 LSB
Max. number of modules	5
Module position in system	No limitation
Max. internal source consumption (5 V DC)	120 mA
Input signal connection	WAGO 231 cage clamp connectors, code protection against mistaking
Mounting	35 mm DIN rail
Operating temperature	0 to 70 °C
Max. ambient humidity	< 95 % non-condensing
Weight	200 g
Dimensions (w × h × d)	25 × 104 × 96 mm

Note: Range 40 mA has to be set in DetStudio if current input range is used.

*) Insulation strength 500 V AC / 1 minute, galvanic separation may not be used for safe and unsafe parts separation.

ORDERING INFORMATION

AG-GAI8	8 galvanically separated analogue inputs module (±10 V, ±20 mA), WAGO231-310 connector, data sheet, warranty card

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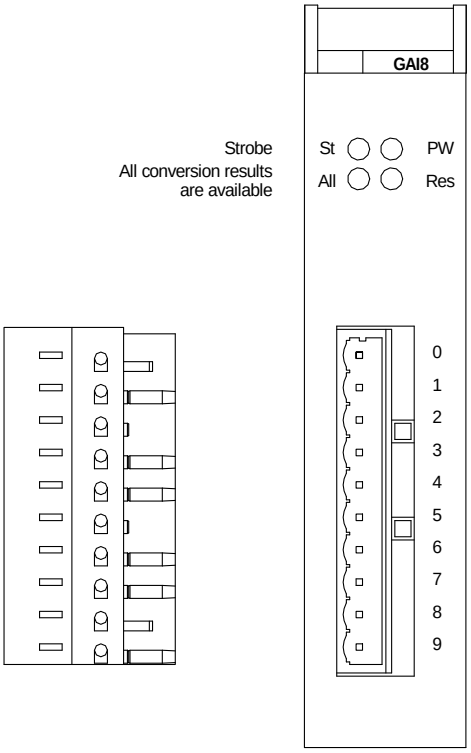
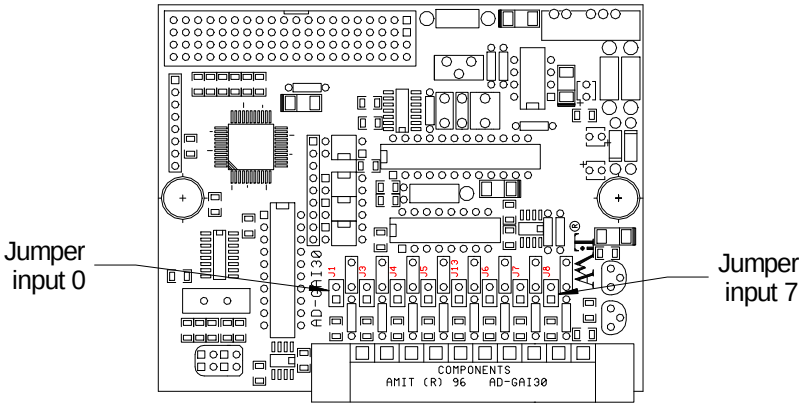
MODULE DESCRIPTION AND SIGNAL ASSIGNMENT



0	**I0**	Input 0
1	**I1**	Input 1
2	**I2**	Input 2
3	**I3**	Input 3
4	**I4**	Input 4
5	**I5**	Input 5
6	**I6**	Input 6
7	**I7**	Input 7
8	**AG**	Analogue GND
9	**AG**	Analogue GND

JUMPERS ASSIGNMENT

The input range is selected by the jumpers that could be accessed after ADiS system disassembling



JUMPERS SETTING

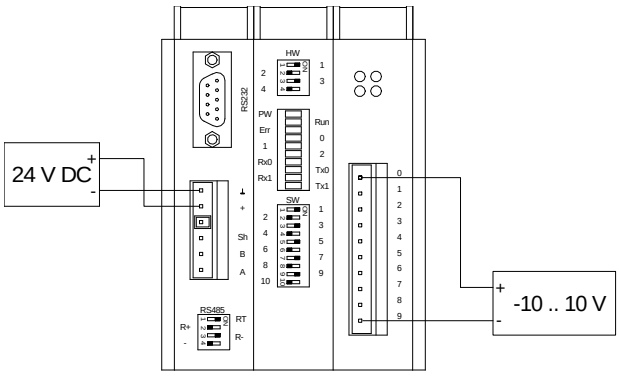
Range
-10 .. +10 V

Range
-20 .. +20 mA

Current range: jumper connected
Voltage range: jumper disconnected

WIRING EXAMPLES

Voltage input



Current input