

The Modbus 4-Channel AI Modul provides four fully isolated, independently configurable inputs. Each input can be configured as either a current input or a voltage input. Various filter functions can be used to suppress interferences.

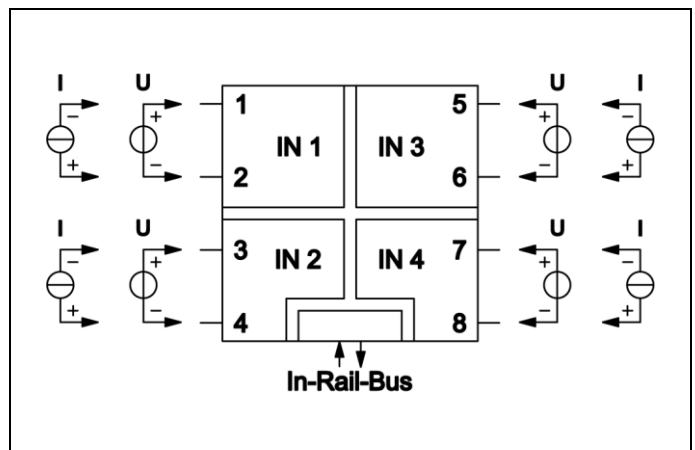
All parameters can be set via the Modbus RTU interface and via a programming socket behind the front panel. A free PC configuration software also offers extended setting options and extensive diagnostic functions during operation. A subset of the most common settings is also available via DIP switches.

The 5 port isolation ensures reliable decoupling of the inputs from each other and from the processing circuit and the power supply. Power supply and Modbus RTU are connected via the rear-mounted In-Rail-Bus connection (see Accessories).



- Acquisition of 4 industrial standard signals**
 Individually configurable as current or voltage input
- 4 galvanic isolated inputs**
 Protection against erroneous measurements due to parasitic voltages or ground loops
- Protective 5 port separation up to 300 V AC/DC**
 Test voltage 3 kV
- Fast signal acquisition**
 High measuring rate, short processing times
- In-Rail-Bus connector for Modbus and Power Supply**
 Allows fast and economical installation
- Freely scalable**
 Up to 247 GEORGIN Module in one Modbus segment
- Extremely slim design**
 6.2 mm slim housing for a simple and space saving DIN rail mounting
- 5 Years Warranty**
 Defects occurring within 5 years from delivery date shall be remedied free of charge at our plant (carriage and insurance paid by sender)

Block diagram

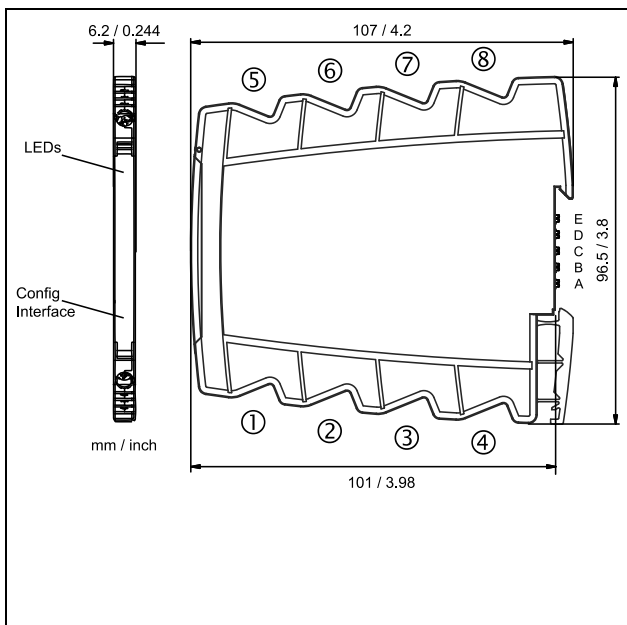


Technical Data

Input	Voltage	Current
Input signal	0 to 10 V	0 to 20 mA
	4 channels, common selectable via DIP switch, individual configurable by software	
Input resistance	≥ 100 kΩ	≤ 25 Ω
Overload	≤ 30 V	≤ 100 mA
Modbus		
Protocol	Modbus RTU (RS485)	
Module addressing	1 to 247	
Baud rate	300, 600, 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200	
Configuration	Parity: Even, Odd, None 2 stop bits, None 1 stop bit	Response delay: 1 to 1000 ms
Connectivity	Up to 247 GEORGIN Modbus devices without additional repeater (1/8 Load)	
General Data		
Measuring error	< 0.1 % full scale	
Temperature coefficient ¹⁾	< 100 ppm/K	
Resolution	14 bit	
Test voltage	3 kV AC, 50 Hz, 1 min. All channels against each other and against Modbus/power supply	
Working voltage ²⁾ (Basic insulation)	600 V AC/DC for overvoltage category II and pollution degree 2 acc. to EN 61010-1	
Protection against dangerous body currents ¹⁾	Protective Separation by reinforced insulation acc. to DIN EN 61010-1 up to 300 V AC/DC for overvoltage category II and contamination class 2 between input and Modbus/power supply	
Ambient temperature	Operation: -25 °C to +70 °C (-13 to +158 °F) Transport and storage: -40 to 85 °C (-40 to +185 °F)	
Power supply	24 V DC	voltage range 16.8 V to 31.2 V DC, max. 1.0 W
EMC ²⁾	EN 61326-1	
Construction	6.2 mm (0.244") housing, protection type: IP 20, mounting on 35 mm DIN rail acc. to EN 60715	
Weight	Approx. 70 g	

1) Average TC related to full scale value in specified operating temperature range, reference temperature 23 °C
 2) For applications with high working voltages, ensure there is sufficient spacing or isolation from neighboring devices and protection against electric shocks.
 3) Minor deviations possible during interference

Dimensions



Terminal assignments

1	+ U	- I	Channel 1
2	- U	+ I	
3	+ U	- I	Channel 2
4	- U	+ I	
5	+ U	- I	Channel 3
6	- U	+ I	
7	+ U	- I	Channel 4
8	- U	+ I	
A	Modbus A		
B	Modbus B		
C	- Power supply		
D	+ Power supply		

Connection

Captive plus-minus clamp screws
 Wire cross-section 0.5 to 2.5 mm² / AWG 20-14
 Stripped length 8 mm / 0.3 in
 Screw terminal torque 0.6 Nm / 5 lbf in
 Optional power connection via In-Rail-Bus (see accessories)

Subject to change!

Product line

Device	Order No.
Modbus 4 Channel AI Module	GMB 96200 B