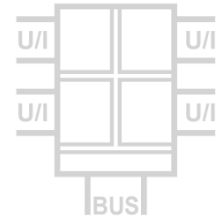


4 Channel AI Module DMB 96200

4 Fully Isolated Analog Inputs, Modbus RTU



The Modbus 4 Channel AI Module 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.

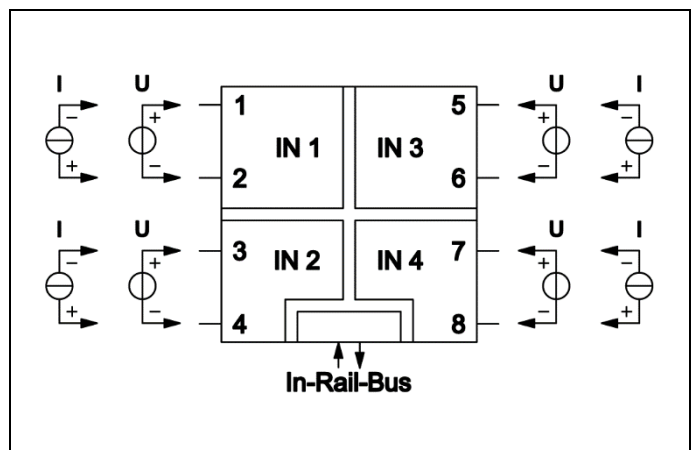
All parameters can be set via the Modbus RTU interface and via a programming socket behind the front panel. A free PC configuration software also offers extended setting options and extensive diagnostic functions during operation. A subset of the most common settings is also available via DIP switches.

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 DRAGO 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

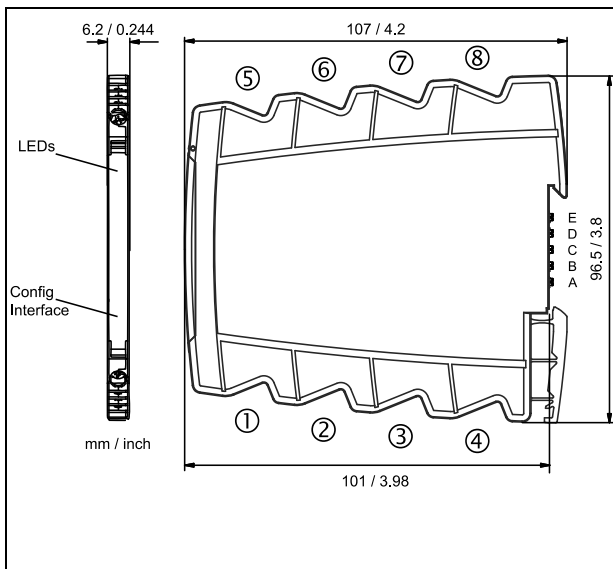
Input	Voltage	Current
Input signal	0 to 10 V 4 channels, common selectable via DIP switch, individual configurable by software	0 to 20 mA
Input resistance	$\geq 100 \text{ k}\Omega$	$\leq 25 \Omega$
Overload	$\leq 30 \text{ V}$	$\leq 100 \text{ mA}$
Modbus		
Protocol	Modbus RTU (RS485)	
Module addressing	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 DRAGO Modbus devices without additional repeater (1/8 Load)	
General Data		
Measuring error	$< 0.1 \%$ full scale	
Temperature coefficient ¹⁾	$< 100 \text{ ppm/K}$	
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: $-25 \text{ }^\circ\text{C}$ to $+70 \text{ }^\circ\text{C}$ (-13 to $+158 \text{ }^\circ\text{F}$) Transport and storage: -40 to $85 \text{ }^\circ\text{C}$ (-40 to $+185 \text{ }^\circ\text{F}$)	
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



Subject to change!

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 mm ² / 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)

Product line

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