

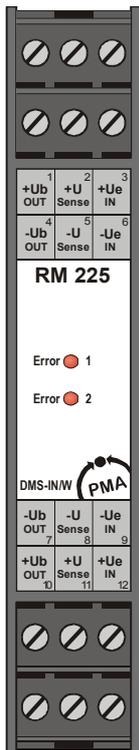


Strain Gage Input Module RM 225

Safety Instructions

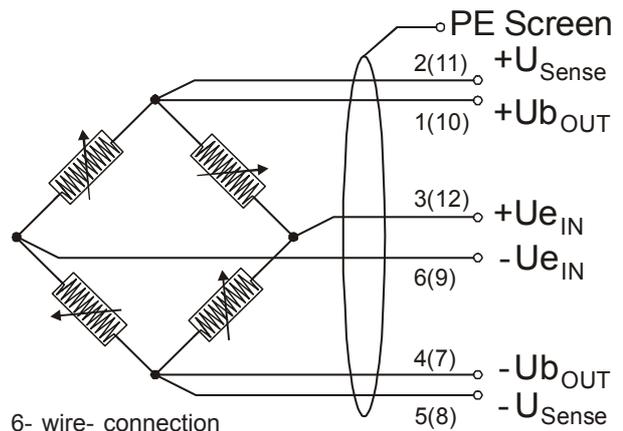
 ESD ! <ul style="list-style-type: none"> contains electrostatically sensitive components Original packing protects against electrostatic discharge (ESD) Transporting only in the original packing during mounting rules for protection against ESD must be followed 	 Connections <ul style="list-style-type: none"> Wiring must be conform to local standards (e.g. VDE 0100 in Germany) ! Input leads must be kept separate from signal and mains leads ! The protective earth must be connected to the relevant terminal (in the instrument carrier) ! The cable screening must be connected to the terminal for grounded measurement ! Usage of twisted and screened input leads prevent stray electric interference ! Connections must be made according to the connecting diagrams ! 	 Maintenance / Repair <p>Instrument needs no particular maintenance.</p>  <p>When opening the instrument live parts or terminals can be exposed. Before carrying out the instrument must be disconnected from all voltage sources. The instrument contains electrostatically sensitive components. The following work may be carried out only by trained, authorized persons.</p> <p>Fuse tripped:</p> <ul style="list-style-type: none"> Cause must be determined and removed ! Only fuses of the same type and current rating as the original fuse must be used. Using repaired fuses or short-circuiting the fuse socket is inadmissible !
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Pin Assignment



Pin	Assignment	
1	+Ub _{OUT}	Strain Gage Sensor 1
2	+U _{Sense}	
3	+Ue _{IN}	
4	-Ub _{OUT}	
5	-U _{Sense}	
6	-Ue _{IN}	
7	-Ub _{OUT}	Strain Gage Sensor 2
8	-U _{Sense}	
9	-Ue _{IN}	
10	+Ub _{OUT}	
11	+U _{Sense}	
12	+Ue _{IN}	
Art.-No.	9407-738-22501	

Electrical Connection



6- wire- connection

4- wire- connection: connect Ub_{OUT} and U_{Sense} at the Ub-terminal of the sensor.

Screen: connect the screen with the PE-terminal of the housing of the fieldbus device.

Technical Data RM 225

Inputs:	2 analog inputs for direct connection of transducers with strain gage resistance in Wheatstone bridges with 6-wire connection.
Input measuring range:	-4 mV/V ... +4 mV/V
Resolution:	18 Bit
Sensor types:	1, 2, 3 and 3.3 mV/V
Input impedance:	>10 M Ω
Bridge excitation:	Integrated bridge excitation, ca. 3 V DC, load \geq 75 Ω
Over-voltage protection:	Inputs protected with Transil diodes
Filter:	<ul style="list-style-type: none">● analog: low pass $f_{\text{cut off}} < 50$ Hz● digital: low pass of 1. order (parametrizable via fieldbus)
Configuration:	The functions calibration (zero and span) and tare are selectable via fieldbus.
Supply voltage:	The module is supplied of the bus coupler via the bus plane.
Power dissipation:	2 Watts
Linearity:	≤ 0.01 %
Accuracy:	better than 0.05 % at 25 °C
Cycle time:	5 Hz. Programmable digital filtering parametrizable via the used fieldbus.
LED-display:	1 LED for channel specific errors (sensor breakage, input data overflow)
Potential isolation:	The logic-part is galvanically isolated from the inputs. Additionally, there is a galvanic isolation between the power supply and the inputs. The inputs are also galvanically isolated from each other.
Ambient temperature:	<ul style="list-style-type: none">● Operation: 0 ... +50 °C● Storage: -20 ... +70 °C● Influence: ≤ 0.05 % / 10K of span
Climatic application class:	≤ 75 % humidity, no condensation
Shock sensitivity:	DIN 40046 IEC68-2-69
Electromagnetic compatibility:	<ul style="list-style-type: none">● DIN EN 50081 Part 1● DIN EN 50082 Part 2● DIN EN 61326 
Electrical connection:	screw-/plug-in-terminals, line cross-section max. 2.5 mm ² (wires should be of screened type)
Housing:	Polyamid PA 6.6, combustibility class V0 according to UL 94
Class of protection:	IP 20 with the fully equipped device
Dimensions:	99 x 17.5 x 114.5 mm (h x w x d)
Weight:	77 g
Montage:	plugged-in and locked in front of base module
Usage position:	vertical

Subject to technical alterations!