



### **M3 – 5-digit digital panel meter in 96x24 mm (BxH) Pt100 (3-/4-wire) -200.0°C...850.0°C / -328.0°F...1562.0°F**

- red display from -19999...99999 digits (optional green, orange, blue or tricolour display)
- installation depth: 120 mm without plug-in screw terminal
- multi voltage power supply unit 100-240 VAC, alternatively 10-40 VDC galv. isolated
- adjustment via factory setting or directly on the sensor signal
- min/max-memory with adjustable permanent display
- display flashing at threshold value exceedance / undercut
- flexible alarm system with adjustable delay times
- brightness control via parameter or front keys
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 1 or 2 relay outputs
- optional: 1 independently scalable analog output
- optional: interface RS232 or RS485
- accessories: pc-based configuration-kit PM-TOOL with CD & USB adapter
- on demand: devices for working temperatures of -20°C...60°C or -40°C...70°C

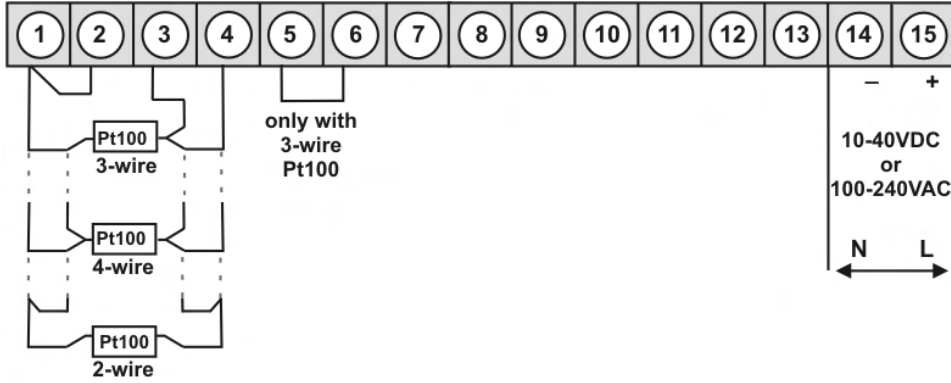
- Pt100 (3-/4-wire) -200.0°C...850.0°C / -328.0°F...1562.0°F

Supply 100-240 VAC, DC ± 10%

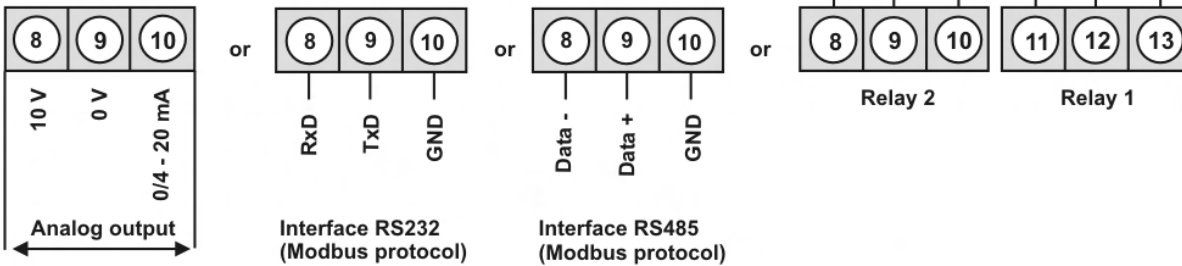
M3-3TR5B.010C.S70BD

Supply 10-40 VDC, 18-30 VAC

M3-3TR5B.010C.W70BD



Options:



Alternatively to analog output

• Product key options

M	3-	3	T	R	5	B.	0	1	0	C.	S	7	0	B	D
M	3-	3	T	R	5	B.	0	1	0	C.	W	7	0	B	D

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1	1 relay output (with option analog output only 1 switching point is possible)
2	2 relay outputs
1	without keypad, operation on the back side
X	Analog output 0/4-20 mA, 0-10 VDC
3	Interface RS232 galv. isolated
4	Interface RS485 galv. isolated
B	Blue
G	Green
Y	Orange
T	Tricolour (Red-Green-Orange)

On demand state dimension unit on order, e.g. °F.

• Parameterisation software

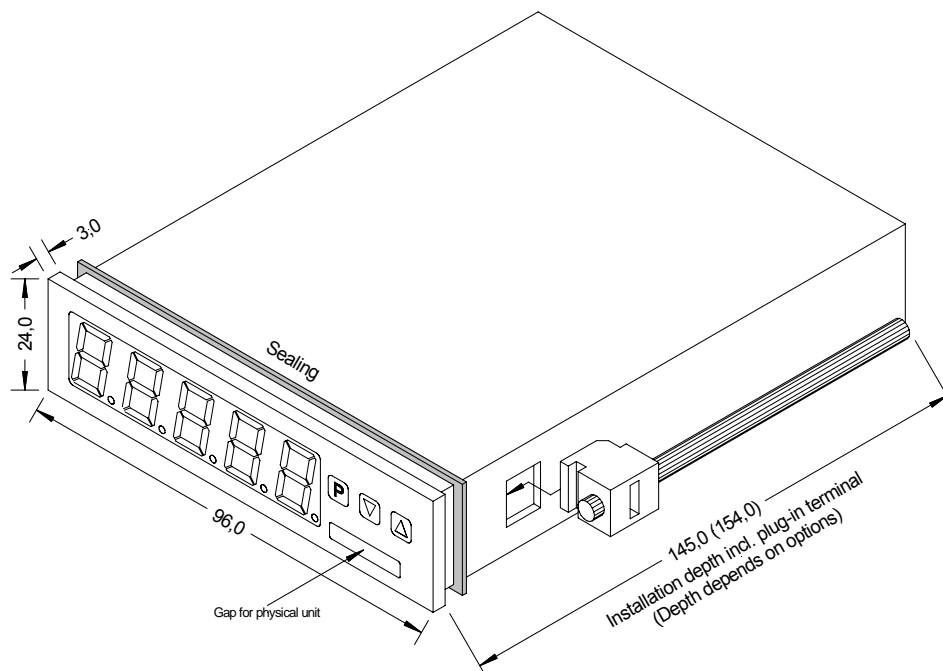
PC based configuration software PM-Tool for devices without keypad, for a simple adjustment of standard devices, incl. CD & USB-adapter. Programming is made via an interface on the back.

PM-TOOL-MUSB4

## • Technical data

<b>Dimensions</b>	Housing	B96 x H24 x D120 mm, (incl. plug-in terminal D= 145 mm cable outlet at the back)
	Panel cut-out	92.0 <sup>+0.8</sup> x 22.2 <sup>+0.3</sup> mm
	Fixing	screw elements for a wall thickness up to 3 mm
	Housing material	PC Polycarbonate, black
	Sealing material	EPDM, 65 Shore, black
	Protection class	at the front IP65 standard, at the back IP00
	Weight	approx. 250 g
	Connection	plug-in terminal; wire cross section up to 2.5 mm <sup>2</sup>
<b>Display</b>	Display	5-digit
	Digit height	14 mm
	Segment colour	red (Standard), optional in green, orange, blue or tricolour (red/green/orange)
	Range of display	-19999 to 99999
	Threshold value	optical display flashing
	Overflow	horizontal bars at the top
	Underflow	horizontal bars at the bottom
	Display time	0.1 to 10.0 seconds
<b>Measuring input</b>	Measuring range	-200.0°C...850.0°C / -328.0°F...1562.0°F
	Measuring fault	0.1% of measuring range, ± 1 Digit
	Temperature drift	100 ppm/K
	Measuring time	0.1 ... 10.0 seconds
	Measuring principle	U/F-conversion
	Resolution	0.1°C or 0.1°F
<b>Output</b>	Relay	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC
	Switching cycle	30 * 10 <sup>3</sup> at 5 AAC, 5 ADC ohm resistive burden, 10 * 10 <sup>6</sup> mechanically Separation according to DIN EN50178 / Specific values according to DIN EN 60255
	Analog output	0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 Bit
<b>Interface</b>	Protocol	Modbus with ASCII or RTU-protocol
	RS232	9.600 Baud, no parity, 8 DataBit, 1 StopBit, pipeline length max. 3 m
	RS485	9.600 Baud, no parity, 8 DataBit, 1 StopBit, pipeline length max. 1000 m
<b>Power pack</b>	Supply	100-240 VAC 50/60 Hz, DC ± 10 % (max. 10 VA) 10-40 VDC galv. isolated, 18-30 VAC 50/60 Hz (max. 10 VA)
	EEPROM	Data preservation ≥ 100 years at 25°C
<b>Ambient condition</b>	Working temperature	0°C to + 50 °C
	Storing temperature	-20°C to + 80 °C
	Climatic density	relative humidity 0-85% on years average without dew
<b>CE-sign</b>	Conformity to directive 2004/108/EG	
<b>EMV</b>	EN 61326, EN 55011	
<b>Safety standard</b>	According to low voltage directive 2006/95/EG, EN 61010; EN 60664-1	

### Housing:



• Order key

	M	3-	3	T	R	5	B.	0	1	0	C.	W	7	0	B	D	
<b>Standard type M-Line</b>																	<b>Dimension</b>
																	<input type="checkbox"/> D physical unit (on demand)
<b>Installation depth</b> 145 mm incl. plug-in terminal (154 mm)																	<b>Version</b>
																	<input type="checkbox"/> B B
<b>Housing size</b> 96x24x120 mm (BxHxT)																	<b>Switching points</b>
																	<input type="checkbox"/> 0 without
																	<input type="checkbox"/> 1 1 relay output
																	<input type="checkbox"/> 2 2 relay outputs
<b>Display type</b> Temperature																	<b>Protection class</b>
																	<input type="checkbox"/> 1 without keypad, operation via PM-TOOL
																	<input type="checkbox"/> 7 IP65 / plug-in terminal
<b>Display colours</b> Blue Green Red Red/Green/Orange Orange																	<b>Supply voltage</b>
																	<input type="checkbox"/> S 100-240 VAC
																	<input type="checkbox"/> W 10-40 VDC
<b>Number of digits</b> 5-digits																	<b>Measuring input</b>
																	<input type="checkbox"/> C Pt100 -200°C...850°C
<b>Digit height</b> 14 mm																	<b>Analog output</b>
																	<input type="checkbox"/> 0 without
																	<input type="checkbox"/> X 1x 0-10 VDC, 0/4-20 mA
<b>Digital input</b> without Interface RS232 Interface RS485																	<b>Temperature devices</b>
																	<input type="checkbox"/> 1 Pt100 3-/4-wire