



### **M3 – 5-digit digitales panel meter 96x48 (BxH) Standard signal 0/4-20 mA, 0-10 VDC**

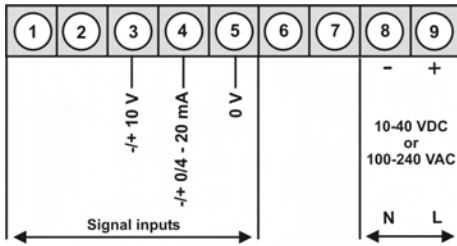
- red display of -19999...99999 digits (optional green, orange, blue or tricolour display)
- installation depth: 120 mm without plug-in screw terminal
- multi voltage power supply unit 100-240 VAC, alternatively 10-40 VDC
- adjustment via factory setting or directly on the sensor signal
- min-/max-memory with adjustable permanent display
- 30 additional adjustable support points
- display flashing at threshold value exceedance / undercut
- zero key for the triggering of Hold, Tara, display change, setpoint setting, alarm actuation
- flexible alarm system with adjustable delay times
- volume measurement (Totaliser)
- mathematical functions like reciprocal value, square root, square and rounding
- constant setting / setpoint setting
- sliding averaging
- brightness control via parameter or front keys
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 2 or 4 relay outputs or 8 PhotoMos-outputs
- optional: sensor supply
- optional: 1 or 2 independently scalable analog outputs
- optional: galv. insulated digital input for the triggering Tara, Hold, display change
- 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...50°C or -20°C...60°C

**ORDER NUMBER**

**EUR**

(without options)

• **Direct current, direct voltage**



Supply 100-240 VAC, DC ± 10%

**M3-1VR5B.0001.S70BD**

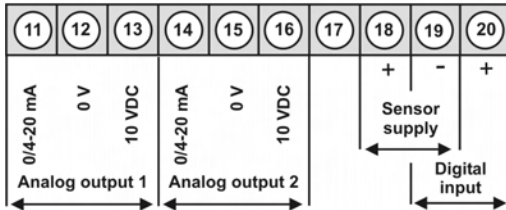
**195,00**

Supply 10-40 VDC, 18-30 VAC

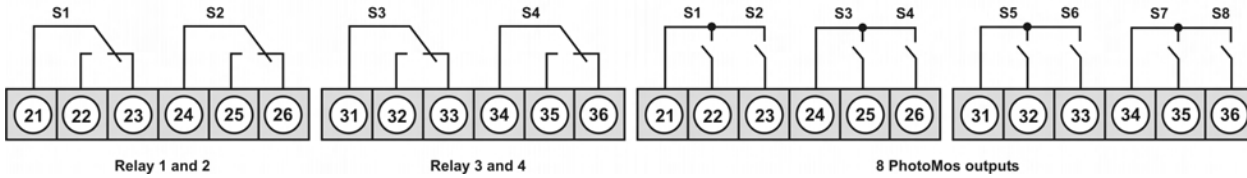
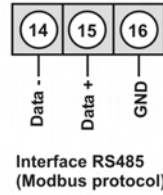
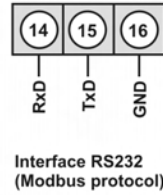
**M3-1VR5B.0001.W70BD**

**210,00**

**Options:**



**alternative for analog output 2**



• **Order key options**

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

**EUR**

2	2 relay outputs	33,00
4	4 relay outputs	66,00
8	8 PhotoMos-outputs	90,00
1	without keypad, operation on the back	10,00
X	Analog output 0/4-20 mA, 0-10 VDC galv. insulated	100,00
Y	2 analog outputs galv. insulated	200,00
2	Sensor supply 10 VDC / 20 mA incl. digital input	25,00
3	Sensor supply 24 VDC / 50 mA incl. digital input	25,00
3	Interface RS232 galv. insulated	55,00
4	Interface RS485 galv. insulated	55,00
I	Digital input galv. insulated	10,00
B	Blue	60,00
G	Green	10,00
Y	Orange	4,00
T	Tricolour (Red-Green-Orange)	30,00

On demand state dimension unit on order, e.g. V.

• **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.

**ORDER NUMBER**

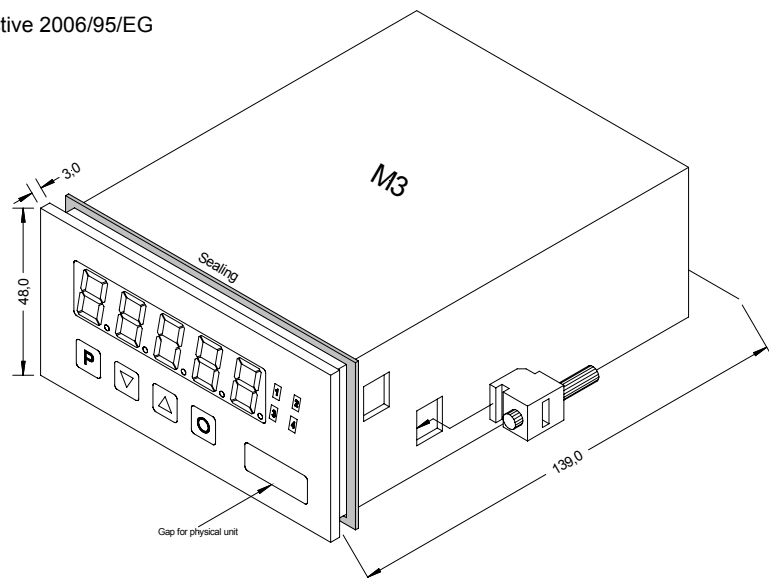
**EUR**

**PM-TOOL-MUSB4**

**89,00**

## • Technical data

<b>Dimensions</b>	Housing	B96 x H48 x D120 mm, (incl. plug-in terminal D = 139 mm)
	Panel cut-out	92.0 <sup>+0.8</sup> x 45.0 <sup>+0.6</sup> mm
	Fixing	screw elements for insulation thickness up to 3 mm
	Housing material	PC Polycarbonate, black
	Sealing material	EPDM, 65 Shore, black
	Protection type	front side IP65 standard, back side IP00
	Weight	approx. 350 g
	Connection	plug-in terminal; line 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 available in green, blue, orange or tricolour (red/green/orange)
	Range of display	-19999 to 99999
	Threshold	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>	Span	-12...12 V / -22...24 mA
	Measuring range	0-10 VDC / 0/4-20 mA
	Input resistance	R <sub>i</sub> at ~200 kΩ / R <sub>i</sub> at ~100 Ω
	Measuring fault	0.1% of measuring range, ± 1 Digit / 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	approx. 18 Bit at 1s measuring time
<b>Output</b>	Relays	with change-over contact 250 V / 5 AAC, 30 V / 5 ADC
	Switching cycles	10 * 10 <sup>5</sup> at 5 AAC, 5 ADC contact rate, 10 * 10 <sup>6</sup> mechanically
	PhotoMos output	Separation in accordance with DIN EN50178 / Specifications in accordance with DIN EN 60255
	Analog output	NOC contacts: 30 VDC/AC, 4 A
	Sensor supply	0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 Bit
		24 VDC / 50 mA
		10 VDC / 20 mA
<b>Digital input</b>	Input galv. insulated	< 2.4 V OFF; 10 V ON; max. 30 VDC, R <sub>i</sub> ~ 5 kΩ
<b>Interface</b>	Protocol	manufacturer's specifics ASCII
	RS232	9.600 Baud, no parity, 8 DataBit, 1 StopBit, wire length max. 3 m
	RS485	9.600 Baud, no parity, 8 DataBit, 1 StopBit, wire length max. 1000 m
<b>Power pack</b>	Supply	100-240 VAC 50/60 Hz ± 10 % (max. 15 VA)
		10-40 VDC, galvanic insulated, 18-30 VAC 50/60 Hz (max. 15 VA)
<b>Memory</b>	EEPROM	Data life ≥ 100 years at 25°C
<b>Ambient conditions</b>	Working temperature	0 to + 60 °C
	Storing temperature	-20 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	
<b>Housing:</b>		



• Order key

	M	3-	1	V	R	5	B.	0	0	0	1.	S	7	0	B	D	
<b>Basic type M-Line</b>																	<b>Dimension</b>
																	<input type="checkbox"/> D physical unit (at buyer's option)
<b>Installation depth</b> 139 mm (incl. plug-in terminal)																	<b>Version</b>
																	<input type="checkbox"/> B B
<b>Housing size</b> 96x48x120 mm (BxHxD)																	<b>Switching points</b>
																	<input type="checkbox"/> 0 no switching point
																	<input type="checkbox"/> 2 2 relay outputs
																	<input type="checkbox"/> 4 4 relay outputs
																	<input type="checkbox"/> 8 8 PhotoMos-outputs
<b>Display type</b> V, A, Ohm																	<b>Protection class</b>
																	<input type="checkbox"/> 1 Without keypad, operation on the backside
																	<input type="checkbox"/> 7 IP65 / plug-in terminal
<b>Display colours</b> Blue Green Red Red/Green/Orange Orange																	<b>Voltage supply</b>
																	<input type="checkbox"/> S 100-240 VAC
																	<input type="checkbox"/> W 10-40 VDC galv. insulated
<b>Number of digits</b> 5-digit																	<b>Measuring input</b>
																	<input type="checkbox"/> 1 Direct voltage, direct current
<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
																	<input type="checkbox"/> Y 2x 0-10 VDC, 0/4-20 mA
<b>Digital input</b> without 1 digital input Interface RS232 Interface RS485 Interface RS232 Interface RS485																	<b>Sensor supply</b>
																	<input type="checkbox"/> 0 without
																	<input type="checkbox"/> 2 10 VDC / 20 mA (incl. digital input)
																	<input type="checkbox"/> 3 24 VDC / 50 mA (incl. digital input)