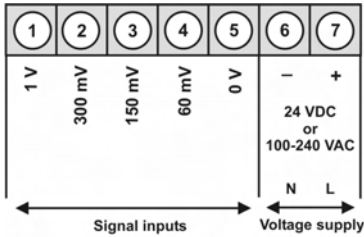




### **M3 – 5-digit digital panel meter in 48x24 mm (BxH) Direct voltage signals – Shunt 60 mV, 150 mV, 300 mV, 1000 mV**

- red display from -19999...99999 Digits (optional green, orange or blue display)
- installation depth: 90 mm without plug-in terminal
- multi voltage power supply unit 100-240 VAC
- adjustment via factory default or directly on the sensor signal
- min-/max-memory with adjustable permanent display
- 30 additional adjustable support points
- display flashing at threshold exceedance / threshold undershooting
- navigation keys for the triggering of Hold, Tara, display change, setpoint setting, alarm actuator
- flexible alarm system with adjustable delay times
- demand measurement and energy measurement at constant voltage
- mathematical functions like reciprocal value, square root, square and rounding
- constant setting / respectively setpoint setting
- sliding averaging
- brightness control via parameters or front keys
- programming interlock via access code
- protection class IP65 at the front
- plug-in screw terminal
- optional: 2 PhotoMos-outputs
- optional: 1 independently scalable analog output
- optional: galv. insulated digital input for the triggering of Tara, Hold, display change
- accessories: pc-based configuration-kit PM-TOOL with CD & USB adapter
- on demand: devices for working temperatures of -20°C...50°C or -40°C...70°C without condensation

• Direct voltage (Shunt)



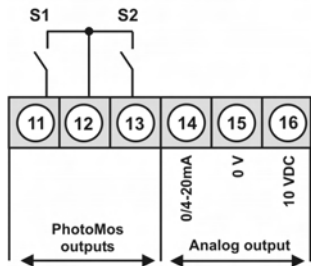
Supply 24 VDC

M3-7VR5A.0002.770BD

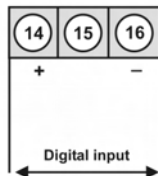
Supply 100-240 VAC, DC ±10%

M3-7VR5A.0002.S70BD

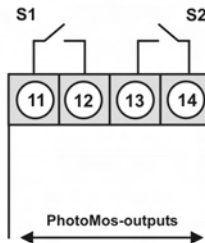
Options: device with a supply of 24 VDC



alternative for analog output



Options: device with a supply of 100-240 VAC



• Product key options: devices with a supply of 24 VDC

M 3- 7 V R 5 A. 0 0 0 2. 7 7 0 B D

EUR

2	2 PhotoMos outputs
1	Without keypad, operation on the back side
X	Analog output 0/4-20 mA, 0-10 VDC galvanic insulated
I	Digital input galvanic insulated
B	Blue
G	Green
Y	Orange

• Product key options: devices with a supply of 100-240 VAC

M 3- 7 V R 5 A. 0 0 0 2. S 7 0 B D

EUR

2	2 PhotoMos outputs
1	Without keypad, operation on the back side
B	Blue
G	Green
Y	Orange

Please state physical unit on demand in your order, e.g. mV.

• 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

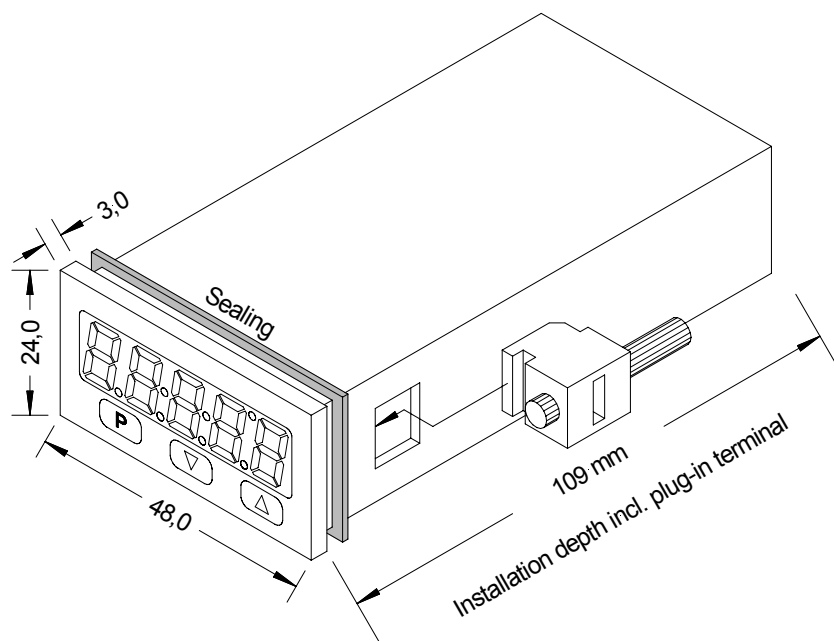
EUR

PM-TOOL-MUSB4

## • Technical data

<b>Housing dimension</b>	Housing	B48 x H24 x T90 mm, (with plug-in terminal D= 109 mm)			
	Panel cut-out	45.0 <sup>+0.6</sup> x 22.2 <sup>+0.3</sup> mm			
	Fixing	screw elements for wall thicknesses 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. 200 g			
	Connection	plug-in terminal; wire cross section up to 2.5 mm <sup>2</sup>			
<b>Display</b>	Display	5-digit			
	Digit height	10 mm			
	Segment colour	red (Standard), optional available in green, orange and blue			
	Display range	-19999 to 99999			
	Limit values	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	-5...75 mV	/ -15...180 mV	/ -30...360 mV	/ -100...1200 mV
	Measuring range	0...60 mV	/ 0...150 mV	/ 0...300 mV	/ 0...1000 mV
	Input resistance	Ri at ~12 kΩ	/ Ri at ~30 kΩ	/ Ri at ~60 kΩ	/ Ri at ~200 kΩ
	Measuring fault	0.2% of measuring range, ± 1 Digit / 0.2% 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 1second measuring time			
<b>Output</b>	PhotoMos	Closer contacts: 30 VDC/AC, 0.4 A			
	Analog output	0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 Bit			
<b>Digital input</b>	Input galv. insulated	<2,4 V OFF; 10 V ON; max. 30 VDC, R <sub>i</sub> ~ 5 kΩ			
<b>Power pack</b>	Supply	100-240 VAC 50/60 Hz / DC ± 10% (max. 5 VA) 24 VDC ± 10 %, galvanic insulated (max. 4 VA)			
<b>Memory</b>	EEPROM	Data life ≥ 100 years at 25°C			
<b>Ambient conditions</b>	Working temperature	0 to + 50 °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				

### Housing:



• Order key

	M	3-	7	V	R	5	A.	0	0	0	2.	7	7	0	B	D	
<b>Standard type M-Line</b>																	<b>Dimension</b>
																	<input type="checkbox"/> D physical unit
<b>Installation depth</b>																	<b>Version</b>
109 mm (incl. plug-in terminal)																	<input type="checkbox"/> B B
<b>Housing size</b>																	<b>Switching points</b>
48x24x90 mm (BxHxD)																	<input type="checkbox"/> 0 no switching point
																	<input type="checkbox"/> 2 2 PhotoMos-outputs
<b>Display type</b>																	<b>Protection class</b>
mV																	<input type="checkbox"/> 1 without keypad, operation on the back
<b>Display colours</b>																	<input type="checkbox"/> 7 IP65 / pluggable terminal
Blue																	<b>Supply voltage</b>
Green																	<input type="checkbox"/> 7 24 VDC galv. insulated
Red																	<input type="checkbox"/> S 100-240 VAC
Orange																	<b>Measuring input</b>
<b>Number of digits</b>																	<input type="checkbox"/> 2 Shunt
5-digit																	<b>Analog output</b>
<b>Digit height</b>																	<input type="checkbox"/> 0 without
10 mm																	<input type="checkbox"/> X 0-10 VDC, 0/4-20 mA
<b>Digital input</b>																	<b>Sensor supply</b>
without																	<input type="checkbox"/> 0 without
1 digital input																	