

M1 – 4-digit digital panel meter in 48x24 mm (WxH)

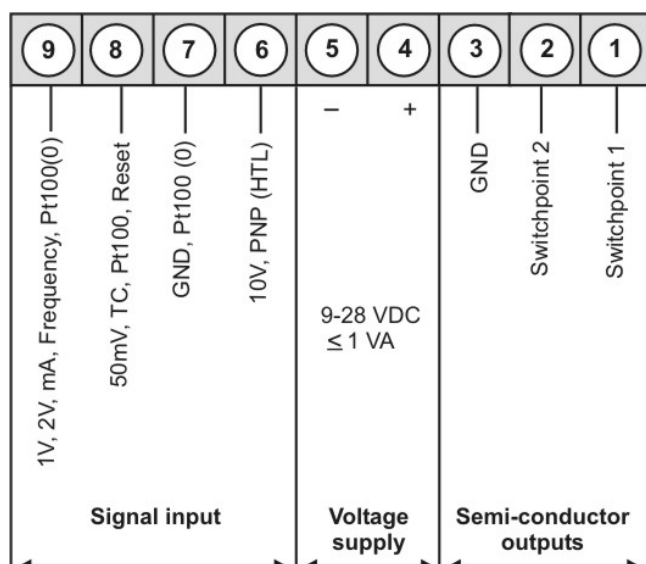
Multi-function measuring input: Direct voltage, Direct current, Pt100(0), Frequency, Thermocouple, Rotation speed, Counter

- red display of -1999...9999 Digits (optional green, orange or blue display)
- minimal installation depth: 52 mm without plug-in screw terminal
- digit height 10 mm
- min/max-value recording
- 5 adjustable supporting points
- display flashing at threshold value exceedance/undercut
- Tara-function
- two semiconductor switching points galv. not isolated
- programming interlock via access code
- protection class IP65 at the front side
- plug-in screw terminal
- accessories: PC-based configuration kit PM-TOOL with USB-adapter



ORDER NUMBER **EUR**
(without options)

• Multi-function measuring input



Supply 9-28 VDC
(galv. not isolated)

M1-7UR4A.000X.372xD **166.80**

Note:
Terminals 3, 5 and 7 are electrically connected in the device.

• Order key for options

M	1-	7	U	R	4	A.	0	0	0	X.	3	7	2	x	D		EUR	
																D	Dimension/physical unit, customer-specific settings	20.00
																B	Blue	35.00
																G	Green	10.10
																Y	Orange	10.10

Please quote physical unit by order, like e.g. m/min.

• Parameterisation software

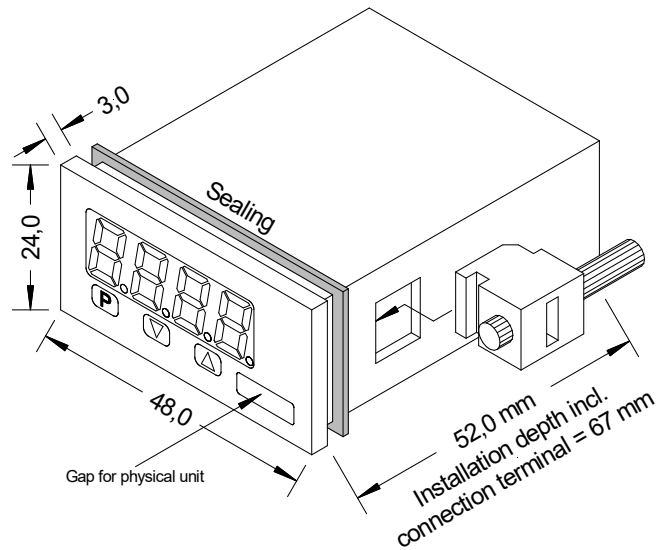
PC-based configuration software PM-TOOL, for devices without keypad;
for a simple adjustment of standard devices, incl. CD & USB-adapter.
Programming happens via interface on the back side.

PM-TOOL-MUSB4 **94.30**

• Technical data

Housing	Dimensions	W48 x H24 x D52 mm, (with plug-in terminal D=67 mm)	
	Panel cut-out	45.0 ^{+0.6} x 22.2 ^{+0.3} mm	
	Fixing	screw elements for a wall thickness up to 5 mm	
	Housing material	PC Polycarbonate, black, UL94V-0	
	Sealing material	EPDM, 65 Shore, black	
	Protection class	IP65 (Standard) at the front, IP00 at the back side	
	Weight	approx. 100 g	
Connection	plug-in terminal; wire cross section up to 1.5 mm ²		
Display	Display	4-digit	
	Digit height	10 mm	
	Segment colour	red (Standard), optional available in green, blue or orange	
	Display range	-1999 to 9999	
	Switching points	LED S1, LED S2	
	Overflow	horizontal bars at the top	
	Underflow	horizontal bars at the bottom	
Display/Measuring time	0.1 to 10.0 seconds		
Measuring input			
Signal	Measuring range	Measuring span	Resolution
Voltage	0...10 V (R _i > 100 kOhm)	0...12 V	≥ 14 bit
Voltage	0...2 V (R _i ≥ 10 kOhm)	0...2.2 V	≥ 14 bit
Voltage	0...1 V (R _i ≥ 10 kOhm)	0...1.1 V	≥ 14 bit
Voltage	0...50 mV (R _i ≥ 10 kOhm)	0...75 mV	
Current	4...20 mA (R _i = ~125 Ohm)	1...22 mA	
Current	0...20 mA	0...22 mA	
Pt100-3-wire	-50...200°C	-58...392°F	0.1°C / 0.1°F
Pt100-3-wire	-200...850°C	-328...1562°F	1°C / 1°F
Pt1000-2-wire	-200...850°C	-328...1562°F	1°C / 1°F
Thermo K	-270...1350°C	-454...2462°F	1°C / 1°F
Thermo S	-50...1750°C	-328...3182°F	1°C / 1°F
Thermo N	-270...1300°C	-454...2372°F	1°C / 1°F
Thermo J	-170...950°C	-274...1742°F	1°C / 1°F
Thermo T	-270...400°C	-454...752°F	1°C / 1°F
Thermo R	-50...1768°C	-58...3214°F	1°C / 1°F
Thermo B	80...1820°C	176...3308°F	1°C / 1°F
Thermo E	-270...1000°C	-454...1832°F	1°C / 1°F
Thermo L	-200...900°C	-328...1652°F	1°C / 1°F
Frequency	0...10 kHz	0...10 kHz	0.001 Hz
NPN	0...3 kHz	0...3 kHz	0.001 Hz
PNP	0...1 kHz	0...1 kHz	0.001 Hz
Rotation speed	0...9999 1/min	0...9999 1/min	0.001 1/min
Counter	0...9999 (Prescaler up to 1000)		
Pulse counter	TTL / Low <2 V / High >3 V	HTL/PNP / Low <6 V / High >8 V	
	NPN / Low <0.8 V / High via resistance	Namur / Low <1.5 mA / High >2.5 mA	
Reset input	Active <0.8 V		
Measuring error	Standard	0.2% of measuring range ±1 digit	
	Pt100 / Pt1000	0.5% of measuring range ±1 digit	
	Thermocouples	measuring range ±1 digit	
Accurateness	Reference junction	± 1°C	
	Drift of temperature	100 ppm/K	
	Measuring time	0.01...2.0 seconds	
	Measuring rate	approx. 1/s at temperature sensor, approx. 100/s at standard signals	
	Measuring principle	U/F-conversion	
Output	Resolution	approx. 14 bit at 1s measuring time	
	Semiconductor switchpoint	Low-side / NPN: max. 28V, 100 mA / High / PNP U _v -3V, 100 mA	
Power pack	Supply	9-28 VDC galvanic not isolated, ≤1 VA	
Memory	EEPROM	Data preservation ≥ 100 years at 25°C	
Ambient conditions	Working temperature	-20 to +50°C	
	Storing temperature	-30 to +70°C	
	Weathering resistance	relative humidity 0-85% on years average without dew	
CE-sign	Conformity according to directive 2014/30/EU		
EMV	EN 61326		
Safety standard	According to low voltage directive 2014/35/EU; EN 61010; EN 60664-1		

Housing:



• **Order key**

	M	1-	7	U	R	4	A.	0	0	0	X.	3	7	2	x	D									
Standard type M-Line																	Operation								
Installation depth 67 mm incl. plug-in terminal																	D	physical unit							
Housing size 48x24x52 mm (WxHxD)																		Version							
																		x	internal version						
Display type Multi-function meas. input																			Switching points						
																			2	2 semiconductor switchpoints					
Display colours Green Red Orange Blue																				Protection class					
																				7	IP65 / plug-in terminal				
Number of digits 4-digit																					Voltage supply				
																					3	9-28 VDC, galv. not isolated			
Digit height 10 mm																						Measuring input			
																						X	Voltage, Current, Temperature, Frequency		
Interface without																							Analog output		
																							0	without	
																								Sensor supply	
																								0	without