



IM3 – 5-digit digital panel meter in 96x24 mm (BxH) AC voltage signals / AC current signals – rms-value (TRMS) 50 VAC, 5 AAC

- 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 galvanic isolated
- 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
- navigation keys for the triggering of Hold, Tara, display change, setpoint setting, alarm actuation
- flexible alarm system with adjustable delay times
- power measurement and energy measurement at constant voltage
- 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: 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

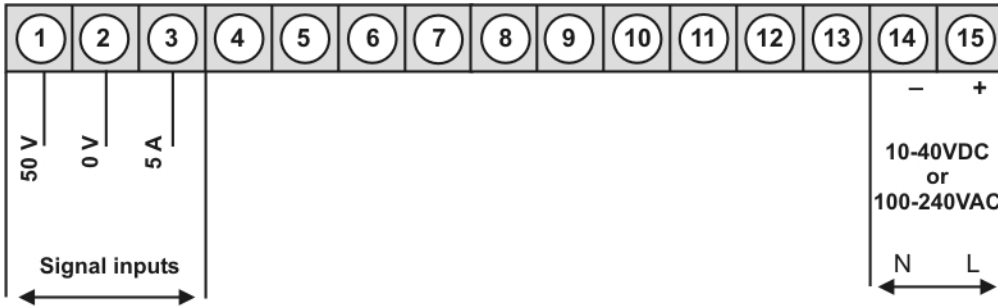
• **AC current, ac voltage (true RMS value)**

Supply 100-240 VAC, DC ± 10%

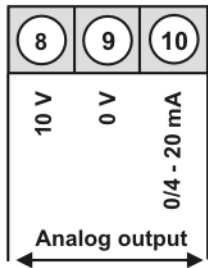
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Supply 10-40 VDC, 18-30 VAC

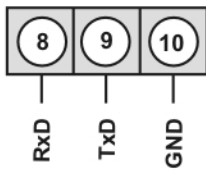
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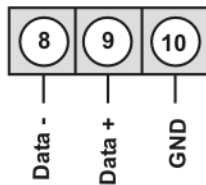
Options:



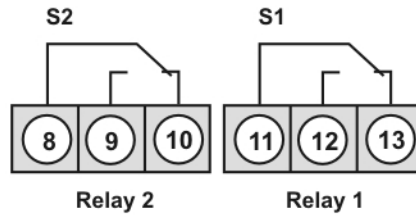
or



or



or



Interface RS232
(Modbus protocol)

Interface RS485
(Modbus protocol)

Alternative to analog output

• **Product key options**

IM	3-	3	V	R	5	B.	0	0	0	4.	S	7	0	B	D
IM	3-	3	V	R	5	B.	0	0	0	4.	W	7	0	B	D

EUR

1	1 relay output (with option analog output only 1 switching point is possible)	20,00
2	2 relay outputs	30,00
1	without keypad, operation on the back side	10,00
X	Analog output 0/4-20 mA, 0-10 VDC	90,00
3	Interface RS232 galv. isolated	65,00
4	Interface RS485 galv. isolated	65,00
B	Blue	44,00
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 happens via an interface on the back.

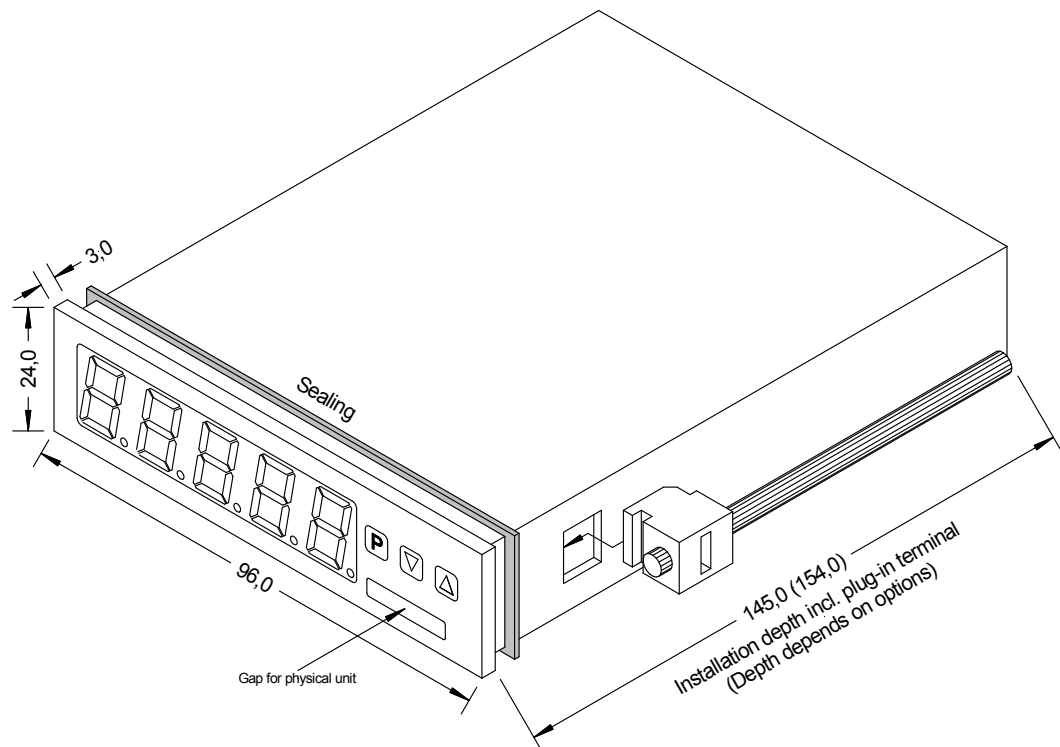
PM-TOOL-MUSB4

89,00

• **Technical data**

Dimensions	Housing Panel cut-out Fixing Housing material Sealing material Protection class Weight Connection	B96 x H24 x D120 mm, (incl. plug-in terminal D= 145 mm cable outlet at the back) 92.0 ^{+0.8} x 22.2 ^{+0.3} mm screw elements for a wall thickness up to 10 mm PC Polycarbonate, black EPDM, 65 Shore, black at the front IP65 standard, at the back IP00 approx. 250 g plug-in terminal; wire cross section up to 2.5 mm ²
Display	Display Digit height Segment colour Range of display Threshold value Overflow Underflow Display time	5-digit 14 mm red (Standard), optional in green, orange, blue or tricolour (red/green/orange) -19999 to 99999 optical display flashing horizontal bars at the top horizontal bars at the bottom 0.1 to 10.0 seconds
Measuring input	Measuring range Input resistance Measuring fault Temperature drift Measuring time Measuring principle Resolution	50 VAC / 5 AAC Ri at ~ 200 kΩ / Ri at ~ 0,05 Ω 0.5 % of final value with 50 Hz ... 1 kHz to crest factor 4 for input signals from 1%...100% of final value 100 ppm/K 0.1 ... 10.0 seconds U/F-conversion approx. 18 bit at 1s measuring time
Output	Relay Switching cycle Analog output	with change-over contact 250 V / 2 AAC, 30 V / 2 ADC 30 * 10 ³ at 2 AAC, 2 ADC ohm resistive burden, 10 * 10 ⁶ mechanically Separation according to DIN EN50178 / Specific values according to DIN EN 60255 0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 bit
Interface	Protocol RS232 RS485	Modbus with ASCII or RTU-protocol 9.600 Baud, no parity, 8 DataBit, 1 StopBit, pipeline length max. 3 m 9.600 Baud, no parity, 8 DataBit, 1 StopBit, pipeline length max. 1000 m
Power pack	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)
Memory	EEPROM	Data preservation ≥ 100 years at 25°C
Ambient condition	Working temperature Storing temperature Climatic density	0 to +50°C -20 to +80°C relative humidity 0-85% on years average without dew
CE-sign	Conformity to directive 2014/30/EU	
EMV	EN 61326, EN 55011	
Safety standard	According to low voltage directive 2014/35/EU, EN 61010; EN 60664-1	

Housing:



• Order key

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