



### **IM3 – 5-digit digital panel meter in 96x24 mm (BxH) Direct current / direct voltage signals 0/4-20 mA, 0-10 VDC**

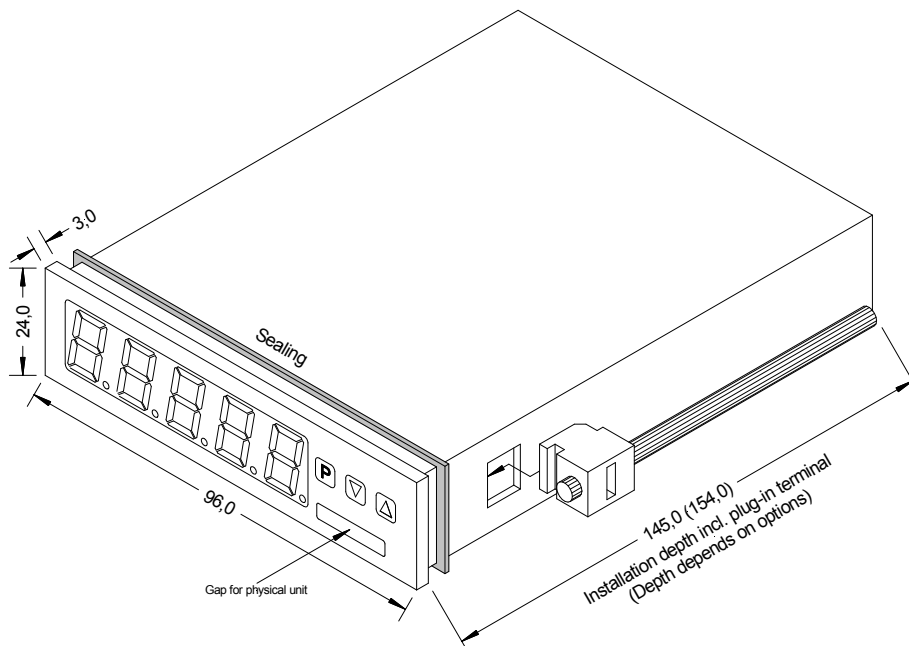
- red display from -19999...99999 digits (optional green, orange, blue or tricolour display)
- installation depth: 120 mm without plug-in screw terminal
- multi voltage power supply unit 100-240 VAC, alternatively 10-40 VDC galvanic isolated
- adjustment via factory setting or directly on the sensor 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
- 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: 1 or 2 relay outputs
- optional: sensor supply
- optional: 1 independently scalable analog output
- optional: galv. isolated 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...60°C or -40°C...70°C



• **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 10 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>	Span	-12...12 V	/ -22...24 mA
	Metering range	0-10 VDC	/ 0/4-20 mA
	Input resistance	Ri with ~200 kΩ	/ Ri with ~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>	Relay	with change-over contact 250 V / 2 AAC, 30 V / 2 ADC	
	Switching cycle	30 * 10 <sup>3</sup> at 2 AAC, 2 ADC ohm resistive burden, 10 * 10 <sup>6</sup> mechanically	
	Analog output	Separation according to DIN EN50178 / Specific values according to DIN EN 60255	
	Sensor supply	0-10 VDC / burden ≥ 10 kΩ, 0/4-20 mA / burden ≤ 500 Ω, 16 bit	
		24 VDC / 50 mA	
		10 VDC / 50 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	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)	
<b>Memory</b>	EEPROM	data preservation ≥ 100 years at 25°C	
<b>Ambient condition</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 2014/30/EU		
<b>EMV</b>	EN 61326, EN 55011		
<b>Safety standard</b>	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	1.	W	7	0	B	D
<b>Standard type M-Line</b>																
<b>Installation depth</b> 145 mm incl. plug-in terminal (154 mm)	3															
<b>Housing size</b> 96x24x120 mm (BxHxT)	3															
<b>Display type</b> V, A	V															
<b>Display colours</b> Blue Green Red Red/Green/Orange Orange	B G R T Y															
<b>Number of digits</b> 5-digits	5															
<b>Digit height</b> 14 mm	B															
<b>Digital input</b> without 1 digital input Interface RS232 Interface RS485 Interface RS232 Interface RS485	0 I galv. isolated 3 galv. isolated 4 galv. isolated C incl. digital input D incl. digital input															
	<b>Dimension</b>															
	D physical unit (on demand)															
	<b>Version</b>															
	B B															
	<b>Switching points</b>															
	0 without 1 1 relay output 2 2 relay outputs															
	<b>Protection class</b>															
	1 without keypad, operation via PM-TOOL 7 IP65 / plug-in terminal															
	<b>Supply voltage</b>															
	S 100-240 VAC W 10-40 VDC															
	<b>Measuring input</b>															
	1 Direct voltage, direct current															
	<b>Analog output</b>															
	0 without X 1x 0-10 VDC, 0/4-20 mA															
	<b>Sensor supply</b>															
	0 without 2 10 VDC / 50 mA (incl. digital input) 3 24 VDC / 50 mA (incl. digital input)															