

Hand-Held multifunction process calibrators // MC 75.2

for electrical signals



MC 75.2



Highlights

- Highest accuracy & Data logger
- Generation of RTD-, TC-, mA- and V signals as well as frequency and pulses
- Connection of pressure modules possible

Technical data

Resistance thermometers (RTD)

Generation and measurement of RTD signals	Pt50, Pt100, Pt200, Pt500, Pt1000, Cu10, Cu50, Ni100, Ni120, Ni1000
Ω-generator function	0...4000 Ω
Ω-measurement function	0...4000 Ω
Accuracy (of reading + const.)	± 0.012 %
Selectable temperature unit	$^{\circ}\text{C}$ / $^{\circ}\text{F}$
Measurement of multi-wire connections	2 / 3 / 4

Thermocouples (TC)

Generation and measurement of TC signals	J, K, T, R, S, B, N, E, U, L
mV-generator function	0...100 mV
mV-measurement function	0...100 mV
Accuracy (of reading + const.)	± 0.013 %
Selectable temperature unit	$^{\circ}\text{C}$ / $^{\circ}\text{F}$
Internal comparison point	± 0.3 $^{\circ}\text{C}$

Current (mA)

Loop current signal generation	0(4)...24 mA
Loop current signal measurement	0(4)...50 mA
Accuracy (of reading + const.)	± 0.0175 %
Current loop supply	24 V ± 10 %, 22 mA
HART Communication protective resistor	250 Ω

Voltage (V)

Voltage signal generation	0...20 V
Voltage signal measurement	0...50 V
Accuracy (of reading + const.)	± 0.015 %

Technical data

Technical data	
Continuity (O/C)	
Continuity measurement	O / C
Switching threshold „open“	1 kΩ
Frequency and pulse (Hz)	
Frequency and pulse signal generation	0.01 Hz...10 kHz
Frequency and pulse signal measurement	0.01 Hz...20 kHz
Accuracy (of reading + const.)	±0.005 %
Pressure signals (bar)	
Pressure measurement with external pressure module	✓
Editable pressure units	✓
Connection via DIN socket	5-pin

Functions	
Generation	
High-speed call values	10 points (flexible)
Linear steps and ramps	✓
User-defined synthesiser values	100
User-defined signal output characteristic	10 points
Editable units	✓
Transmitter function simulation	✓
Measurement	
Data memory	10 000 values
Value tables and graphics function	✓
Offset programming for sensor characteristic	✓
Calibration data files and linearisation points	5 x 4 values
User-defined measuring input characteristic	10 points
Editable units	✓
Measured value min. / max.	✓
Averaging function	✓

General data	
Features	
Sensor connection	8 safety sockets (2 channels) incl. push lock, 4 sets with safety instrument leads (4 mm) and alligator clips (optional)
Power supply	Rechargeable battery including power adapter, 230 VAC / 12 VDC
Operator guidance	Menu with pull-down windows Separate channels for parallel signal processing
Display	Multifunction display, double-LCD, 2 x 6 digit, illuminated
Housing	
Version	ABS plastic with protective cover
Dimensions	110 x 210 x 50 mm (H x W x D)
Weight	Approx. 900 g

Article numbers

Order code		
Type	Version	Order number
MC 75.2	Accuracy ± 0.0175 % of reading + const.	EME8AOMC075020

Order code	
Accessories	Order number
DAkkS certificate	EKSIMMULTI000D
SIKA works calibration certificate	EKSIMMULTI000W
Transport case	EME8GKK3100000
Plug connector 4 mm, red	EME8AOSKLS40RT
Plug connector 4 mm, black	EME8AOSKLS40SW
External pressure module, see page 4	EME8AOACL...

External pressure module // EPM

for multifunction process calibrator MC 75.2



Ext. pressure module EPM

Technical data	
Pressure range	-1...1000 bar
Measuring rate	400 measurements / sec.
Digital signals	RS 485
Electrical connection	5-pin 1 m shielded connecting cable
Medium temperature	10...40 °C
Pressure connection	G¼ stainless steel 1.4404
Degree of protection	IP65
Dimensions	Approx. D = 30 mm, L = 110 mm
Weight	Approx. 140 g

Article numbers

Order Code			Article number
External pressure module			
External pressure module	-1...1 bar, rel. 0.05% f.s.		EME8AOACLAR0001
External pressure module	-1...3 bar, rel. 0.05% f.s.		EME8AOACLAR0003
External pressure module	-1...10 bar, rel. 0.05% f.s.		EME8AOACLAR0010
External pressure module	-1...30 bar, rel. 0.05% f.s.		EME8AOACLAR0030
External pressure module	-1...30 bar, rel. 0.025% f.s.		EME8AOACLBR0030
External pressure module	-1...30 bar, rel. 0.01% f.s.		EME8AOACLCR0030
External pressure module	0...100 bar, abs. 0.05% f.s.		EME8AOACLAR0100
External pressure module	0...100 bar, rel. 0.01% f.s.		EME8AOACLCR0100
External pressure module	0...300 bar, abs. 0.05% f.s.		EME8AOACLAR0300
External pressure module	0...300 bar, abs. 0.025% f.s.		EME8AOACLBA0300
External pressure module	0...300 bar, rel. 0.01% f.s.		EME8AOACLCR0300
External pressure module	0...700 bar, abs. 0.05% f.s.		EME8AOACLAR0700
External pressure module	0...700 bar, abs. 0.025% f.s.		EME8AOACLBA0700
External pressure module	0...1000 bar, abs. 0.05% f.s.		EME8AOACLAR1000

More measuring ranges on demand.