

# Multifunction process calibrators // EC 10 // EC 25

for electrical signals



EC 10



EC 25



## Highlights

- Generation of RTD, TC- mA- and V signals
- Frequency and pulse simulation (EC25)
- For mobile on-site calibration

## Technical data

Type	EC 10	EC 25
<b>Resistance thermometers (RTD)</b>		
Generation and measurement of RTD signals	Pt100, Pt200, Pt500, Pt1000, Cu10, Cu50	
$\Omega$ -generator function	0...4000 $\Omega$	0...40 000 $\Omega$
$\Omega$ -measurement function	0...5500 $\Omega$	0...5500 $\Omega$
Accuracy (of reading + const.)	$\pm 0.05$ %	$\pm 0.02$ %
Selectable temperature unit	$^{\circ}\text{C} / ^{\circ}\text{F}$	
Measurement of multi-wire connections	2 / 3 / 4	2 / 3
<b>Thermocouples (TC)</b>		
Generation and measurement of TC signals	J, K, T, R, S, B, N, E, U, L	J, K, T, R, S, B, N, E
mV-generator function	-100...1100 mV	-100...110 mV
mV-measurement function	-50...550 mV	
Accuracy (of reading + const.)	$\pm 0.02$ %	
Selectable temperature unit	$^{\circ}\text{C} / ^{\circ}\text{F}$	
Internal comparison point	$\pm 0.5$ $^{\circ}\text{C}$	
<b>Current (mA)</b>		
Loop current signal generation		0...22 mA
Loop current signal measurement		-5...55 mA
Accuracy (of reading + const.)		$\pm 0.02$ %
Current loop supply		24 V $\pm 10$ %, 22 mA
<b>Voltage (V)</b>		
Voltage signal generation		-1...11 V
Voltage signal measurement		-5...55 V
Accuracy (of reading + const.)		$\pm 0.02$ %

# Technical data

Technische Daten		
Type	EC 10	EC 25
<b>Continuity (O/C)</b>		
Continuity measurement	0 / C	
Switching threshold „open“	0.5 kΩ	
<b>Frequency and pulse (Hz)</b>		
Frequency and pulse signal generation		3 Hz...110 kHz
Frequency and pulse signal measurement		3 Hz...50 kHz
Accuracy (of reading + const.)		±0.005 %

Functions		
Type	EC 10	EC 25
<b>Generation</b>		
High-speed call values		7 points (fix) in 25 % steps
Linear steps and ramps		✓
Output zero	✓	✓
Transmitter function simulation		✓
<b>Measurement</b>		
Measured value hold function	✓	✓
Averaging function	✓	✓
Room temperature display	✓	✓

General data		
Type	EC 10	EC 25
<b>Features</b>		
Sensor connection	4 safety sockets (1 channel) incl. 2 sets with safety instrument leads (4 mm) and alligator clips	
Power supply	4 x 1.5 V AAA-battery Operating time approx. 25 h with auto-power-off	4 x 1.5 V AAA-battery Operating time approx. 20 h with auto-power-off
PC Interface		
Operator guidance	Keypad	
Display	Multifunction display LCD, 5½ digit, illuminated	Multifunction display double-LCD, 5½ digit, illuminated
<b>Housing</b>		
Version	ABS plastic with protective cover	
Dimensions	210 x 100 x 40 mm (H x W x D)	
Weight	Approx. 550 g	

# Article numbers

Order code		
Type	Version	Order number
EC 10	Accuracy $\pm 0.05$ % of reading + const.	EME8VCEC010000
EC 25	Accuracy $\pm 0.02$ % of reading + const.	EME8VCEC025000

Order code	
Accessories	Order number
DAkkS certificate	EKSIMMULTI000D
SIKA works calibration certificate	EKSIMMULTI000W
Transport case	EME8GKK310000
Plug connector 4 mm, red	EME8AOSKLS40RT
Plug connector 4 mm, black	EME8AOSKLS40SW