

# Multifunction simulators

## EC 10 and EC 25



| Type                                   | EC 10                                   | EC 25                  |
|--|---|------------------------|
| <b>Resistance thermometer (RTD)</b>    |   |                        |
| RTD signal generation and measurement  | 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 (rdg. + const.)               | $\pm 0.05$ %                            |                        |
| Selectable temperature unit            | $^{\circ}\text{C} / ^{\circ}\text{F}$   |                        |
| Measurement of multi-wire connections  | 2 / 3 / 4                               | 2 / 3                  |
| <b>Thermocouples (TC)</b>              |   |                        |
| TC signal generation and measurement   | 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 (rdg. + 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 rdg. + 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 rdg. + const.)            |   | $\pm 0.02$ %           |
| <b>Continuity (0 / C)</b>              |   |                        |
| Continuity measurement                 | 0 / C                                   |                        |
| Switching threshold "open"             | 0.5 k $\Omega$                          |                        |
| <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 rdg. + const.)            |   | $\pm 0.005$ %          |

| Functions                       | 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        | ✓     | ✓                            |

#### EC 10

- Operator guidance  
Keypad
- Battery supply / Operating time  
Approx. 25 h with Auto-Power off

#### EC 25

- Operator guidance  
Keypad  
Separate channels for parallel signal processing
- Battery supply / Operating time  
Approx. 20 h with Auto-Power off