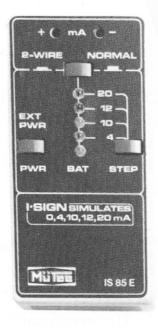


**Testing and Simulating devices** 

- PT 87 EElectronically Pt 100-Simulator combined with a Pt100<br/>temperature measuring device with a LCD display in °C- and Ω
- ST 83 E Current and voltage transmitter as well as a measuring device, 0-20 VDC and 0-20 mA.
- IS 85 E Transmitter simulator for 0, 4, 10, 12 und 20 mA and simulation of 2-wire-transmitter







## PT 87 E

## Characteristics

PT100-Test measures and simulates resistance from Pt-100 transmitters. It is equipped with connectors for both two and three-wire transmitters. The result is resented on a  $4\frac{1}{2}$  digit display, in Ohms or Centigrade.

## **Output signal**

To read the output signal value on the display, turn the switch marked "DSP" to the OUT position, then turn the switch marked "OUT" to the DSP position. Now you can read the wanted temperature °C or resistance Ohm. To begin simulation after the signal has been adjusted, the switch marked OUT" must be turned to the OUT position. During simulation the display is frozen, showing the last set value. When a new value is simulated, the OUT switch must be turned back to DSP and the above procedure has to be repeated.

Output temperature:	Tolerance:	Signal resistance:
-40 to +500°C	<+/-0,1%	84,2 to 280,9 Ohm

## Input Signal

Can be used for both 2-wire and 3-wire connections. To read PT-100 resistance, turn the switch marked "DSP" to the IN position and then read the input signal on the display in temperature (°C) or resistance (Ohm).

Input temperature:	Tolerance:	Signal resistance:
-40 to +500C	<+/-0, 1 %	84,2 to 280,9 Ohm

## Display

The display can be used for temperature (°C) or resistance (Ohm). Choose between output or input indication by turning the switch marked "DSP" to the appropriate position. If battery power fails below the minimum for safe operation, "BAT" is shown on the display.

#### Supply

Normally from 2 x 9V (rechargeable) batteries. PT 100-Test can also be connected directly to the main supply with a special transformer (230 V 50 Hz). The batteries and fuses are mounted under the back plate of the unit for easy access.

## **Other Data**

Working temperature 0 to +50°C Storage temperature -10 to +60°C Relative humidity max 80% Automatic zero Over-range indicator Weight 400 g Size 95 x 159 x 33 mm

## Accessories

Transformer 230 V 50 Hz or 115 V 60 Hz for battery charging Test leads (5 per set) Case

# ST 83 E

## Characteristics

Tests and calibrates all types of control and regulating equipment that use current and Voltage signals, such as signal converters, regulators, transmitters, indicating instruments, vessels etc. Powered by battery, Sign-Test is fast and easy to operate in both field and laboratory environment.

#### **Output Signal**

Select the wanted range with the OUT switch and adjust the signal with the I 0-turn potentiometer. The selected output signal is maintained even when the display switch is turned to BT or OUT. The outlet is short-circuit proof, has transient protection and a 500 mAF fuse.'

Signal	Tolerance	Resolution	Notes
0-20 mA	$<\pm 0,2\%, \pm 1$ digit	10 µA	Max. load 500 $\Omega$
0-10 VDC	$<\pm 0,2\%, \pm 1$ digit	10 mV	Max. current 40 mA
0-2 VDC	$<\pm 0,2\%, \pm 1$ digit	1 mV	Max. current 20 mA

#### **Input Signal**

Select the input range with the IN switch. The input is transient protected and has a 100 n1AF fuse.

Signal	Tolerance	Resolution	Notes
0-20 mA	$<\pm 0,2\%, \pm 1$ digit	10 µA	Ri 30 Ω
0-10 VDC	$<\pm 0,2\%, \pm 1$ digit	10 mV	Ri 2 MΩ
0-2 VDC	<±0,2%, ±1 digit	1 mV	Ri 2 MΩ

## Display

Input and output signals are indicated on the 3Vdigit display with the switch marked IN-BT-OUT. The battery voltage is indicated when the switch is in the BT position. If the battery voltage fails below the minimum for safe operation, MAT" is shown in the display.

## Supply

Normally from  $2 \times 9V$  batteries. Sign-Test can also be connected directly to the mains supply with a special transformer (230 or 1 15V). The batteries and fuses arc mounted under the back plate of the unit for easy access.

## **Other Data**

Working temperature 0 to +50 'C Storage temperature - 10 to +60 'C Relative humidity max. 80 % Automatic zero Automatic polarity Over-range indicator Weight 400 g Size 95x 159x33 mm

## Accessories

Transformer 230 V 50 Hz or 115 V 60 Hz Test leads (4 per set); Case

# IS 85 E.

## Application

Simulation of unity current signals and 2 leader transmitter signals.

#### Features

Handy and cheap piece of equipment with high precision and the simplest operation. An indication indicates the LED, that -- the measuring circle resistance is too high or there is an interruption.

#### **Technical data**

Output signal:	0, 4, 10, 12 and 20 mA by means of tap-dance button. This one shows switching step by means of LED.
	Normal and 2 wire become-by means of keyboard
	Transmitter signal dialed.
Precision	: +/-0.1% v.E. at 20 °C
max. burden	: 700 ohms
max. tension	: 50 VDC for 2 leader business
Work temperature	: 0 to +50 °C
Store temperature	: -10 to +60 °C

#### Supply

Batteries	: 2 x 9 VDC, 500 mAh
Function duration	

Battery operation: On an average 16 hours at 20 mA. LED BAT comes on at undervoltage. You can eat over the loading up power supply unit at longer use time. As an option we deliver rechargeable NC accumulators with the corresponding loading up power supply unit.

#### Mass and weights

Mass	: 130 x 65 x 25 mm
Weight	: 250 g

## Options

Power supply unit Sentence examining strings Synthetic material suitcase

