

## Function test-unit FERROTRON TRECAL



The service- and function test-device FERROTRON **TRECAL** is a testing unit to check and calibrate temperature- and oxygen activity-measuring systems. Besides high accuracy and reliability the handy unit offers simulation possibilities of five types of measurements with pre-selectable types of thermocouples. The function test-unit **TRECAL** will directly be connected to the measuring device via cable or via an appropriate lance adapter to the measuring lance (hand-, automatic- or sublance) for test procedures.

## A MINTEQ DIVISION

The special features of the FERROTRON TRECAL are:

- High precision reference voltage
- Built in cold junction compensation (temperature sensor in the output plug)
- 4-line LED-display with 20 characters each line
- Keyboard with foil and 6 keys for the easiest operation possible
- Distortion voltage can be super-imposed to temperature or/and to EMF-voltage for checking of acceptance by the measuring device
- Insulation check for testing of lance and compensation cable
- Display of temperature selectable in degrees Centigrade or degrees Fahrenheit
- Available option: Check of T-liquidus-channel

## **Specification**

Check temperature	Three types of thermocouples selectable via keyboard: type S (Pt10Rh), type B (Pt18Rh) or type R (Pt13Rh) 3 temperatures, keyboard-selectable in a range of 0°C to 1700°C, free adjustable in the parameter mode (T-liquidus range 1100°C – 1600°C) Display selectable in °C or °F
Check of EMF	3 EMF-values, keyboard-selectable in a range of -300 mV to +300mV, free adjustable in the parameter mode
Types of measurement	<ol> <li>Simulation of <i>Temperature probe</i></li> <li>Simulation of <i>Oxygen probe 3-wires</i></li> <li>Simulation of <i>Oxygen probe 4-wires</i></li> <li>Insulation check</li> <li>Simulation of T-<i>Liquidus probe</i> (option)</li> </ol>
Accuracy	thermocouples S, R or B $(1000 - 1700^{\circ}C) \pm 0.05\% \pm 0.5^{\circ}C$ T-liquidus channel S, R or B $(1100 - 1600^{\circ}C) \pm 0.05\% \pm 0.1^{\circ}C$ EMF channel (-300 mV to +300mV) $\pm 0.05\% \pm 0.1$ mV (related to 20°C environmental temp.)
Power supply	$4 \times 1,5 \vee$ Mignon size AA or $4 \times 1,2 \vee$ MH-accumulator, 1500 mAh, Battery operation for about 200 measurements, automatically controlled
Operation temperature 0 to 40°C	
Dimensions	190 x 160 x 75 mm <sup>3</sup> (190 mm width with side bag) Housing made of tough plastic (Polystyrene UL-94HB) in a leather case
Weight	approx. 1,3 kg (complete with batteries, adapter and leather case)
Supply	<ul> <li>E116TRECAL - complete device including leather case, batteries, cable connector and one lance adapter</li> <li>E116TRECALLiq - complete device with option T-liquidus channel</li> </ul>

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