TEMPERATURE MEASUREMENTS IN MOLTEN METALS

Digital temperature measurement instrument
SIDERTEMP-III

The SIDERTEMP-III line digital measuring instruments are suitable for reliable temperature measurements in molten metals.

The four digits red LED display, 7 segments, 56 mm high, allows the Operator to read the displayed values from a distance, even under difficult light conditions.

Three sequential LED bulbs, green-yellow-red, are located on the front panel, indicating the status of the measurement (ready, measure in progress, end of measure).

SIDERTEMP-III is equipped with a user-friendly internal self-test device, to be used when necessary to easily check accuracy.

All types of immersion thermocouples SUPERTEMP made by SIDERMES are an ideal complement for these instruments, that can anyhow be used also with other probes.

SIDERTEMP-III can operate on 2 separate input channels for 2 different measurement stations (optional).

Internal flash memory of SIDERTEMP-III can save hundreds of measurements, with date and hour of each.
Technical Characteristics:

- **Measuring principle:** Microprocessor-based measured signal analysis, through digital differentiation and mean value linearized determination.

- **Measuring range**
  - **Temperature:**
    - 500°C±1800°C
    - Type S (Pt-10%Rh / Pt)
    - Type R (Pt-13%Rh / Pt)
    - Type B (Pt-6%Rh / Pt-30%Rh)
    - 500°C±1400°C
    - Type K (Ni-Cr / Ni-Al)
    - 500°C±2000°C
    - Type W (W/Re) also available

- **Calibration:**
  - ITS-90
  - Also available IEC 584-1 1977
    (IPTS-68)
  - IEC 584-2 1982, Class 1-2

- **Display:**
  - 4 digits, red LED, 7 segments

- **Digits height:**
  - 56 mm

- **Reference T:**
  - 0°C with cold junction compensation

- **Resolution:**
  - 1°C

- **Accuracy:**
  - ±0.1% of measuring range

- **Measurement sequence:**
  - "ready", "measuring", "end" with traffic-light on the front panel.

- **Outputs:**
  - (a) For data transmission:
    - RS-232, RS-485 MODBUS slave,
    - (RS-485 MODBUS master)
  - (b) For remote display (high digits display) current loop 20mA TTY,
    - ASCII code.

- **On demand:**
  - PROFIBUS DP, ETHERNET, 4-20mA analogic, BCD....

- **Power supply:**
  - 120÷230VAC ~ 50-60Hz. Max 10W per channel.