

## Study of temperature measurement methods

### DESCRIPTION

- The unit is delivered complete with instrumentation and with technical documentation and instructions
- This unit is designed for various levels and different fields of study.



### SUGGESTED APPLICATIONS

- Study of 8 different types of temperature sensors.
- Observation of the measured parameters (potential difference for thermocouples, resistance for Pt100 and thermistor)
- Use of tables of conversion of physical parameter/measured value
- Study of various errors
- Calibration of a set of sensors/indicators using a reference.

## ■ THE SENSORS

- With platinum resistance
- Thermistor
- Thermocouples K
- Thermocouples J
- One mercury thermometer
- One liquid emptying thermometer with dial
- One bimetallic thermometer with dial
- Psychometric sensor for the determination of RH (relative humidity)

## ■ THE INSTRUMENTS

- One indicator for the measurement of low resistances 0-400  $\Omega$  (Pt100 probe)
- One indicator for the measurement of low voltages 0-30mV (thermocouples)
- One indicator for the measurement of high resistances 0-25K  $\Omega$  (thermistor)
- Connection of the sensors by cavalier jumpers on sockets of  $\varnothing$  4 mm and selection by a rotary selector
- Speed control for the fan

## ■ APPARATUS

- One thermoregulator group for the measurement of hot water up to 100°C
- One set heating element + fan for the measurement of the hot air temperature
- One DEWAR vessel for the measurement of the point 0°C

Supports for various sensors

### UTILITIES

Electricity : 230 V single-phase - 50/60 Hz

### SAFETY

Differential breaker 30 mA  
APAVE Certification

### DIMENSIONS AND WEIGHT

Length	:	880 mm
Width	:	530 mm
Height	:	570 mm
Weight	:	30 kg