

## INTRODUCTION

The Mini Infra Red Calibrator is mainly structured by 58mm diameter target assembly and dry-well temperature system controlled by microcomputer. External reference thermometer is a metal cone with good heat-conducting ability, on the surface of thermometer there is a oxide film with emissivity 0.95.

The Calibrator is applied a class-A PT 100 as a sensor with a temperature control system and wind-cold device. The calibrator has rapid heating and cooling function and is switch able °C/°F which can be used in different temperature unit calibration.

The calibrations can be done over a range of 50°C to 500°C. Temperature display and stability resolution is 0.1 degree.



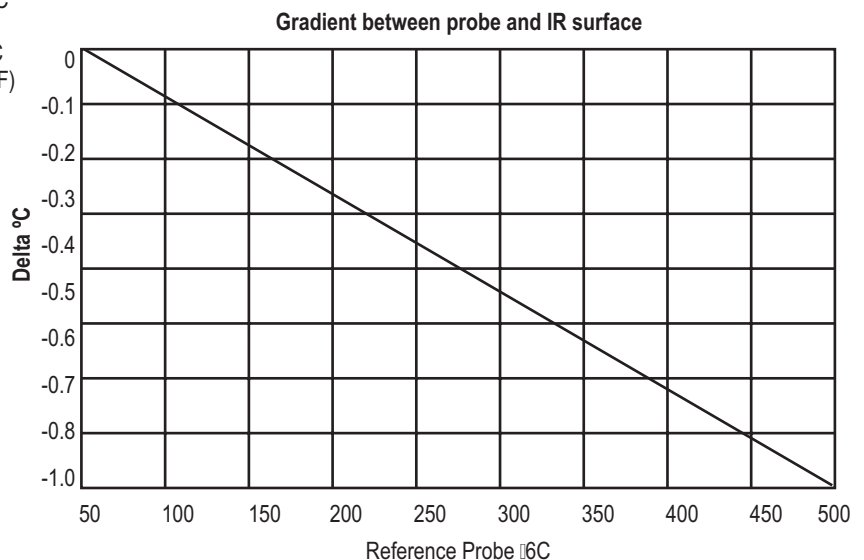
## GENERAL SPECIFICATIONS

<b>Range</b>	: 50°C to 500°C (122°F to 932°F)
<b>Accuracy</b>	: ± 0.8°C at temp ≤ 100°C (± 1.6°F at Temp ≤ 212°F) ± 1.6°C at 100°C < Temp ≤ 200°C (± 3.2°F at 212°F < Temp ≤ 392°F) ± 2.8°C at 200°C < Temp ≤ 500°C (± 5.6°F at 392°F < Temp ≤ 932°F)
<b>Stability</b>	: ± 0.1°C at Temp ≤ 100°C (± 0.2°F at Temp ≤ 212°F) ± 0.2°C at 100°C < Temp ≤ 350°C (± 0.4°F at 212°F < Temp 662°F) ± 0.4°C at 200°C < Temp ≤ 500°C (± 0.8°F at 392°F < Temp ≤ 932°F)
<b>Target Emissivity</b>	: 0.95
<b>Resolution</b>	: 0.1°C/0.1°F
<b>Heating Time</b>	: 30 minutes to max
<b>Cooling Time</b>	: 30 minutes to 100°C (122°F)
<b>Aperture Diameter</b>	: 58 mm
<b>Power</b>	: 220VAC (±10%), 1.25A/110VAC (±10%), 2.5A
<b>Size</b>	: 180 x 114 x 233 mm
<b>Weight</b>	: 3 kg

## ENVIRONMENTAL CONDITIONS

Although the instrument has been designed for optimum durability and trouble-free operation, it must be handled with care. The instrument should not be operated in an excessively dusty or dirty environment.

Maintenance and cleaning recommendations can be found in the Maintenance section of this manual. The instrument operates safely under the following conditions:



<b>Temperature range</b>	: 5-35°C (41-95°F)
<b>Ambient relative humidity</b>	: 15-80%
<b>Pressure</b>	: 75kPa - 106kPa
<b>Mains voltage within</b>	: 10% of nominal
<b>Vibrations in the calibration environment should be minimized</b>	

\*Technical Specifications & Appearance are subject to change without prior notice