

Reg No: 2021/990064/07



# **CERTIFICATE OF CALIBRATION**

## CERTIFICATE NUMBER: 308-89542

| Manufacturer<br>Model No | :<br>: |  |
|--------------------------|--------|--|
|                          | -      | Picc Electronics<br>17 Cherry Place Street<br>Paulshof |

|                     |   | 07 September 2022<br>06 September 2022 |  |
|---------------------|---|--|--|
| Technical Signatory | : | J. Ysel (Jnr)                          |  |
| Calibrated by       | : | J.W. Ysel                              |  |
| Checked by          | : | J.L. Steinberg                         |  |

The South African National Accreditation System (SANAS) is a member of the International Laboratory Accreditation Co-Operation (ILAC) for the Mutual Recognition Agreement (MRA). The MRA allows for the mutual recognition of technical test and calibration data by the member accreditation bodies worldwide. For more information on the MRA please refer to www.ilac.org

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The calibration values in the certificate were correct at the time of calibration. The continuous accuracy of the instrument will depend on such factors as the care exercised in handling and use of the instrument and the frequency of use. Re-calibration should be performed after a period which has been chosen to ensure that the item's accuracy remains within the desired limits.

The decision rule of Repcal Services is a shared risk. The uncertainty was not considered when Pass/Acceptance or Fail/Rejection statements were made to specifications. The customer is responsible to ensure that the equipment and calibration results are fit for purpose.

| 508 Nupen Crescent | P.O. Box 6093 | Phone (011) 315 3134                |
|--------------------|---------------|-------------------------------------|
| Halfway House      | Halfway House | Fax (011) 315 8726                  |
| Midrand            | 1685          | e-mail: <u>service@repcal.co.za</u> |

## REPCAL SERVICES SANAS ACCREDITED CALIBRATION LABORATORY

#### 1. LABORATORY STANDARDS AND EQUIPMENT USED FOR MEASUREMENTS

| Standards or                               | Serial  | Certificate | Due     |  |
|--|---------|-------------|---------|--|
| Equipment                                  | Number  | Number      | Date    |  |
| Fluke 1552A Digital Thermometer with Probe | 4670006 | 308-88552   | 2023/08 |  |
| Fluke 9190A Dry Block Calibrator           | B97848  | Source Only | N/A     |  |

#### 2. **PROCEDURE**

2.1 Procedure used: - TEMP 13

#### 3. **REMARKS**

#### 3.1. Traceability

The accuracy of the equipment used during calibration is traceable to the National Measuring Standards as maintained in Republic of South Africa or International Measuring Standards.

#### **3.2.** Calibration Environment

The Calibration was performed in the Temperature Laboratory of Repcal Services. The Temperature were maintained at: 23 °C  $\pm$  5 °C. The temperature did not vary more than 2°C per hour at the time of calibration.

#### 3.3. Results

The UUT was calibrated to Customers' requirements. These results only apply to the Unit Under Test (UUT) calibrated.

#### **3.4.** Condition of the Unit Under Test

The UUT is in a good condition and fully functional.

#### 3.5. Uncertainties of Measurement

The reported uncertainty of measurement are based on a standard uncertainty multiplied by a coverage factor of k = 2, which unless specifically stated otherwise, provide a level of confidence of approximately 95 %.

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#### 4. METHOD

The Digital Thermometer and Probe was calibrated as a system from 2 °C to 8 °C in a Dry Block Calibrator. The true temperature of the Dry Block Calibrator was measured with a standard digital thermometer with probe.

#### 5. **RESULTS**

| Actual Temperature<br>(°C) | UUT Temperature<br>(°C) | UUT Correction<br>(°C) |
|----------------------------|-------------------------|------------------------|
| <b>ITS-90</b><br>2.0       | 2.0                     | +0.0                   |
| 8.0                        | 8.0                     | +0.0                   |

- 6. UNCERTAINTY: The uncertainty of measurement was:  $\pm 0.5$  °C.
- 7. NOTES
- 7.1 Calibrated from: 2 °C to 8 °C.
- **7.2** Immersion Depth:  $\pm$  150 mm.
- 7.3 Diameter of test probe: 5 mm.
- 7.4 Diameter of reference probe: 6 mm.

\*End of Certificate\*

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