

VM3COP64.02 Aii-2000PALM O2R Calibration Test

Before using this calibration test procedure, the user should refer to the appropriate Aii-2000PALM O2R user manual (Revision 10).

Required equipment: Time Electronics LTD Microcal 1030 – Calibrated Voltage source (CE076) - Calibration traceable to UKAS calibration standards. The specifications can be found on Document ID 30969.

Test lead – 3.5 mm jack to 4 mm banana plugs.

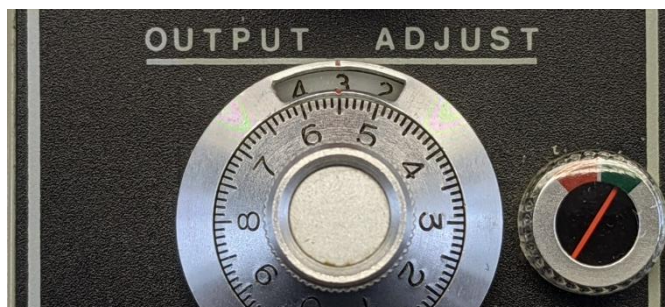
- 1) Connect the Microcal to the Aii-2000PALM O2R analyser using the test lead as shown.



- 2) Set the Microcal to 100 mV scale and the polarity switch to NORM.



- 3) Set the output adjustment dial to 35.0mV.
- 4) Power up the Aii-2000PALM O2R analyser.
- 5) Press the CAL button on the front panel to calibrate the analyser.



- 6) At the end of the calibration procedure the analyser should display 100.0. If the Aii-2000PALM O2R analyser fails to calibrate, check the connections and repeat the test.

The Microcal is simulating the output of an Oxygen sensor reading a 100% Oxygen concentration. By decreasing the output of the Microcal to set values, the accuracy of the Aii-2000PALM O2R analyser can be determined across a range of simulated Oxygen concentrations.



- 7) In turn, dial in the input voltages from the table below. Record the values on the certificate (0180031).
- 8) Save the document and upload to the Intrastats calibration index.
- 9) Print a copy on Viamed letter headed paper.



Microcal output	Aii-2000PALM O2R expected reading ($\leq 2\%$ relative)	
35.0 mV	100%	(98.0% - 102.0%)
31.5 mV	90%	(88.2% - 91.8%)
28.0 mV	80%	(78.4% - 81.6%)
24.5 mV	70%	(68.6% - 71.4%)
21.0 mV	60%	(58.8% - 61.2%)
17.5 mV	50%	(49.0% - 51.0%)
14.0 mV	40%	(39.2% - 40.8%)
10.5 mV	30%	(29.4% - 30.6%)
7.3 mV	20.9%	(20.5% - 21.3%)
6.3 mV	18%	(17.6% - 18.4%)