

CERTIFICATE OF CALIBRATION

Issued by: RS Components Ltd

Date Issued: 17 Mar 2014

Certificate No. 1345344



RS Calibration

Calibration and Repair Service

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DPN 175, Lammas Rd,
Weldon Industrial Est
Corby, Northants, NN17 9RS

Tel: 01536 405545
Fax: 01536 401590

A handwritten signature of 'Mark Connelly'.

MARK CONNELLY

Client	VIAMED LTD KEIGHLEY WEST YORKSHIRE BD20 7DT
Instrument	TIME 1030 MICROCAL
Serial No.	667108/210
Client Reference	CE 076
Procedure ID.	610.348 Rev. P2
Date of Calibration	17 Mar 2014

Remarks

This certificate reports recorded values for the instrument 'As Received'.

Uncertainties

The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor $k = 2$, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.



RS Components takes its environmental responsibilities very seriously and as such has printed this double sided document in black and white, on paper from sustainable sources.

This certificate is issued in accordance with the laboratory accreditation requirements of the United Kingdom Accreditation Service. It provides traceability of measurement to the SI system of units and/or to units of measurement realised at the National Physical Laboratory or other recognised national metrology institutes.

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UKAS Accredited Calibration Laboratory No. 0310

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Calibration and Repair Service

Environment

The ambient temperature and relative humidity throughout the calibration were $(20 \pm 2)^\circ\text{C}$ and $(50 \pm 20)\%$ RH respectively.

Prior to the calibration the instrument was held within the laboratory for a period of not less than 30 minutes.

The instrument was calibrated by outputting values to the input terminals of a digital multimeter and recording the measured values in the tables below.

All measurements are based on four readings. The average measured values are reported in the table below.

Range	Output Value	Measured Value	Measurement Uncertainty
1 V	0.2 V	0.200 16 V	$\pm 550 \mu\text{V}$
1 V	0.6 V	0.600 74 V	# $\pm 560 \mu\text{V}$
1 V	1 V	0.999 83 V	$\pm 580 \mu\text{V}$
100 mV	100 mV	100.021 mV	$\pm 9 \mu\text{V}$
10 mV	10 mV	10.003 6 mV	$\pm 8 \mu\text{V}$
100 mA	100 mA	100.101 mA	$\pm 17 \mu\text{A}$
10 mA	10 mA	9.996 4 mA	$\pm 6 \mu\text{A}$

END OF CALIBRATION

CALIBRATED BY:- MSC

Compliance to Specification

The specification published by the manufacturer and found in the instrument's handbook has been used to determine performance at the measured points.

Reported values not annotated.

The instrument complies with the stated specification, due allowance having been made for the uncertainty of measurement which carries no implication regarding the long term stability of the instrument.

Reported values annotated with a

The measured result is inside the specification limit by a margin less than the measurement uncertainty; it is therefore not possible to state compliance based on the stated level of confidence. However, the result indicates that compliance is more probable than non-compliance.