

CERTIFICATE OF CALIBRATION



Issued by: RS Components Ltd

Date Issued: 17 Aug 2011

Certificate No.

1230925

RS Calibration

Calibration and Repair Service

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MARK CONNELLY

Client	VIAMED KEIGHLEY WEST YORKSHIRE BD20 7DT
Instrument	TIME 1030 MICROCAL
Serial No.	6839K6
Client Reference	CE 076
Procedure ID.	610.348 Rev. P2
Date of Calibration	17 Aug 2011

Equipment Used to Carry Out Calibration

Equipment ID.

Hewlett Packard 34401A Multimeter

Cal 010

The measurements reported in this certificate were carried out using equipment whose values are traceable to national standards.

All procedures employed and results reported are in compliance with the requirements of the International Standard ISO/IEC 17025:2005.

The management controls of the RS Calibration Laboratory are registered under the British Standard BS EN ISO 9001 : 2008 No. RS 00362.

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%.

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



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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	0.199 83 V	$\pm 550 \mu\text{V}$
1 V	0.6 V	0.600 15 V	$\pm 560 \mu\text{V}$
1 V	1 V	0.999 09 V	$\pm 580 \mu\text{V}$
100 mV	100 mV	99.912 mV	$\pm 8 \mu\text{V}$
10 mV	10 mV	9.992 1 mV	$\pm 8 \mu\text{V}$
100 mA	100 mA	99.997 mA	$\pm 17 \mu\text{A}$
10 mA	10 mA	9.986 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.