

# CERTIFICATE OF CALIBRATION

Issued by: RS Components Ltd

Date Issued: 13 Jun 2018

Certificate No. 1531195



## **RS** Calibration

Calibration and Repair Service

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Sharleen Forde

Client	VIAMED LTD KEIGHLEY WEST YORKSHIRE BD20 7DT
Instrument	Thurlby Thandar TF930 Frequency Counter
Serial No.	425571
Client Reference	N/A
Procedure ID.	665_4919_TF930 Rev P8
Date of Calibration	13 Jun 2018

### 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.



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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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## Environment

The ambient temperature and relative humidity throughout the calibration were  $(20 \pm 2) ^\circ\text{C}$  and  $(40 \pm 20) \% \text{RH}$  respectively.

## Method

Prior to the calibration the instrument was held within the laboratory for a period of not less than 1 hour.

The instrument readings are recorded in the table below and are those with the instrument set for an appropriate gate time.

Function & Range	Applied Value	Gate Time	Nominal Amplitutde	Unit Reading	UUT L.S.D Stability
<b>Input A</b>					
50 Hz	50 Hz	1 s	42 mV	50.000029 Hz	0
110 Hz	110 Hz	1 s	42 mV	110.00006 Hz	0
110 Hz	110 Hz	10 s	42 mV	110.000006 Hz	0
1.1 kHz	1.1 kHz	1 s	42 mV	1.1000006 kHz	0
1.1 kHz	1.1 kHz	10 s	42 mV	1.10000065 kHz	0
11 kHz	11 kHz	0.3 s	42 mV	11.000007 kHz	1
11 kHz	11 kHz	1 s	42 mV	11.000007 kHz	0
11 kHz	11 kHz	10 s	42 mV	11.0000065 kHz	0
110 kHz	110 kHz	1 s	42 mV	110.00006 kHz	0
1100 kHz	1100 kHz	1 s	42 mV	1100.0007 kHz	1
11 MHz	11 MHz	1 s	42 mV	11.000007 MHz	1
11 MHz	11 MHz	10 s	42 mV	11.0000065 MHz	0
110 MHz	110 MHz	1 s	42 mV	110.00007 MHz	0
<b>Input B</b>					
110 MHz	110 MHz	0.3 s	70 mV	110.00007 MHz	1
110 MHz	110 MHz	1 s	70 mV	110.00007 MHz	1
110 MHz	110 MHz	10 s	70 mV	110.000065 MHz	0
2000 MHz	2000 MHz	1 s	70 mV	2000.0012 MHz	0
<b>Period</b>					
2 MHz	2 MHz	1 s	42 mV	500.00092 us	0

## Measurement Uncertainties

10 Hz to 100 kHz	$\pm (1 \text{ in } 10^6 + 1 \text{ L.S.D})$
100 kHz to 1 MHz	$\pm (1 \text{ in } 10^7 + 1 \text{ L.S.D})$
1 MHz to 2 000 MHz	$\pm (5 \text{ in } 10^8 + 1 \text{ L.S.D})$