

CERTIFICATE OF CALIBRATION

UKAS Accredited Calibration Laboratory No. 0310

Certificate No.

1478454

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Calibration and Repair Service

The instrument was allowed to stabilise in the laboratory for a period of not less than 1 hour before any measurements were made.

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

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

<u>Input A</u>	Applied Value	Gate Time	Nominal Amplitude	Instrument Reading	UUT L.S.D Stability
	50 Hz	1 s	42 mV	50.000 022 Hz	1
	100 Hz	1 s	42 mV	100.000 04 Hz	0
	1 kHz	1 s	42 mV	1.000 000 4 kHz	0
	10 kHz	0.3 s	42 mV	10.000 005 kHz	1
	10 kHz	1 s	42 mV	10.000 004 kHz	0
	10 kHz	10 s	42 mV	10.000 004 3 kHz	0
	100 kHz	1 s	42 mV	100.000 04 kHz	0
	1 MHz	1 s	42 mV	1000.000 4 kHz	0
	10 MHz	1 s	42 mV	10.000 004 MHz	0
	100 MHz	1 s	42 mV	100.000 04 MHz	1
<u>Input B</u>					
	100 MHz	0.3 s	70 mV	100.000 04 MHz	1
	100 MHz	1 s	70 mV	100.000 04 MHz	1
	100 MHz	10 s	70 mV	100.000 043 MHz	1
	2 000 MHz	1 s	70 mV	2 000.000 1 MHz	1
<u>Period</u>	2 MHz	1 s	42 mV	499.999 99 us	1

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	$\pm (5 \text{ in } 10^8 + 1 \text{ L.S.D.})$

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

The uncertainties quoted refer to the applied values, which include any identified contribution of the instrument under test and not to the ability of the instrument to maintain its calibration.

When in use due allowance should be made for the stability of the reading as found in the 'UUT L.S.D. Stability' column.

The L.S.D component of the above measurement uncertainties refers to the display resolution of the unit.

CERTIFICATE OF CALIBRATION

Issued by: RS Components Ltd

Date Issued: 13 Apr 2017

Certificate No. 1478454



RS Calibration

Calibration and Repair Service

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A handwritten signature of "Mark Connolly" in black ink.

MARK CONNELLY

Client	VIAMED LTD KEIGHLEY WEST YORKSHIRE BD20 7DT
Instrument	Thurlby Thandar TF930 Frequency Counter
Serial No.	425571
Client Reference	CE0185
Procedure ID.	665_4919 Rev. P3
Date of Calibration	13 Apr 2017
Performance Status	Pass

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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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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