

# CERTIFICATE OF CALIBRATION

ISSUED BY AVON-DYNAMIC CALIBRATION

Date of Issue 10 February 2021

Certificate Number K563756



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CALIBRATE MEASURE INNOVATE

For Signatrol Limited,  
Unit E2  
Green Lane Business Park  
Tewkesbury  
Gl20 8sj.

Approved Signatory:  
M.Hyde

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<u>Customer Ref Number</u> :	CE1054	<u>Date of Calibration</u> :	10 February 2021
<u>Date of Receipt</u> :	08 February 2021	<u>Item Type</u> :	TF820
<u>Item Serial Number</u> :	014691		
<u>Instrument Manufacturer</u> :	Thurlby Thandar		
<u>Description</u> :	Frerquency Meter		
<u>Specification Reference</u> :	Specification not available. Results are reported as found.		
<u>Procedure Reference</u> :	CLI054		

## Note

**Calibrations marked ## (Not UKAS Accredited) in this Certificate have been included for Completeness**

Calibrated By : J.Reynolds

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $\kappa = 2$ , providing a coverage probability 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 0199

Certificate Number  
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## REPORT

The unit was allowed to stabilise in the laboratory for 24 hours and switched on for two hours prior to calibration. Instrument specification not available, results are reported as found.

## RESULTS

### Gate Time Measurements

Gate Time Set	Applied Frequency	Expected Unit Indication	Actual Unit Indication	Uncertainty of Measurement
0.1 sec	100 kHz	100.00 kHz	100.00 kHz	± 1.2 mHz
1.0 sec	100 kHz	100.000 kHz	100.000 kHz	± 1.2 mHz
10 secs	100 kHz	100.000 0 kHz	100 000 2 kHz	± 1.2 mHz

### Frequency Accuracy

Range	Applied Frequency	Unit Indication	Uncertainty of Measurement
A	100 kHz	100.000 kHz	± 1.2 mHz
	1 MHz	1 000.004 MHz	± 10 mHz
	10 MHz	10.000 033 MHz	± 0.1 Hz
B	100 MHz	100 000.34 MHz	± 1.0 Hz
	150 MHz	150 000.53 MHz	± 1.5 Hz
	200 MHz	200 000.72 MHz	± 2.0 Hz
C	100 MHz	100.000 4 MHz	± 1.0 Hz
	434 MHz	434.001 6 MHz	± 4.3 Hz
	868 MHz	868.003 1 MHz	± 8.7 Hz
	916 MHz	916.003 3 MHz	± 9.2 Hz

### Additional Details:-

Frequency Standard Accuracy: -0.32 ppm

Input Sensitivity: Up to 150 MHz - <15 mVrms, over 150 MHz - <30 mVrms

Standards Used:- ADC2969, DCS1326, DCS1518, DCS1530.

Laboratory Temperature:- 20°C ± 3°C

Laboratory Humidity:- 50% ± 20% rh

-End of Report-

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor  $\kappa = 2$ , providing a coverage probability of approximately 95%. The uncertainty evaluation has been carried out in accordance with UKAS requirements.

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