## CERTIFICATE OF CALIBRATION

Issued By Transmille Ltd.

Certificate Number 37498

Date of Issue 28 November 2018





Transmille Ltd. **Unit 4, Select Business Centre** Lodge Road Staplehurst, Kent. TN12 0QW. TEL 01580 890700 FAX 01580 890711

Page 1 of 2 Pages

Approved Signatory

☑ G.A. Shapland ☐ M.A. Bailey

☐ S.A. Hawkins

☐ J.J. Bailey

Customer: SIGNATROL LTD

UNIT E2, GREEN LANE BUSINESS PARK

TEWKESBURY GLOUCESTERSHIRE GL20 8SJ

Date Received: 27 November 2018

Instrument:

System ID:

Description:

Manufacturer: Model Number:

Serial Number:

Procedure Version:

T00008047

Frequency Meter

Thurlby-Thander TF820

014691

1.01/N

Job Number:

Ref. Number:

CE1054

Site:

Location:

Last Calibration Certificate: 34766

Last Calibration Date:

15/11/2017

70842-1

### **Environmental Conditions**

Temperature:

20°C +/- 1°C

Relative Humidity: 40% +/- 20%

Mains Voltage:

230V +/- 12V

Mains Frequency: 50Hz +/- 1Hz

#### Comments

Instrument was allowed to stabilise for at least 12 hours before calibration.

#### Calibration Information

The instrument was calibrated against laboratory standards whose values are traceable to recognised National Standards. The uncertainty limits quoted refer to the measured values only, with no account being taken of the instruments ability to maintain its calibration.

The reported expanded uncertainty is 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.

Calibrated By: M. Nelson

Date of Calibration: 28 November 2018

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. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

# **CERTIFICATE OF CALIBRATION**

UKAS Accredited Calibration Laboratory No. 0324 AS FOUND RESULTS

Certificate Number 37498

Page 2 of 2 Pages

Test Title	Applied Value	Reading	Uncertainties
<b>General</b> Controls and display		Pass	
Inputs A/B/C		Pass	
Gate Time Measurements - 10MHz Range, 1MHz input.			
0.1s Gate Time	1 000.00kHz	1 000.00kHz	±21Hz
1s Gate Time	1 000.000kHz	1 000.003kHz	±2.1Hz
10s Gate Time	1 000.000 0kHz	1 000.002 6kHz	±210mHz
Frequency Measurement gate time 1s			
10MHz Range	0.100kHz	0.100kHz	±2.1Hz
10MHz Range	1.000kHz	1.000kHz	±2.1Hz
10MHz Range	10.000kHz	10.000kHz	±2.1Hz
10MHz Range	100.000kHz	100.000kHz	±2.1Hz
10MHz Range	1 000.000kHz	1 000.003kHz	±2.1Hz
10MHz Range	10 000.000kHz	10 000.026kHz	±2.1Hz
200MHz Range	10 000.00kHz	10 000.02kHz	±21Hz
1.3GHz Rng, C I/P	10.000 0MHz	10.000 0MHz	±21Hz
Frequency Measurement gate time 1s (Signatrol frequency points)			
1.3GHz Rng, C I/P	434.000 0MHz	434.000 7MHz	±150Hz
1.3GHz Rng, C I/P	868.000 0MHz	868.001 4MHz	±250Hz
1.3GHz Rng, C I/P	916.000 0MHz	916.001 5MHz	±250Hz

End of results