Schedule of Accreditation

issued by

United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

21354

Accredited to ISO/IEC 17025:2017

Racelogic Limited

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Calibration performed at the above address only

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (k = 2))	Remarks
Electrical measurement capabilities listed below follow the method of direct comparison against laboratory references or established ratio techniques unless otherwise stated in the remark Column.			
ELECTRICAL			
DC Voltage			
Measurement	0 to 100 mV 100 mV to 1 V 1 V to 10 V 10 V to 32 V	10 µV 40 µV 350 µV 2.50 mV	Using a digital multimeter
Frequency			
GPS Receiver	10 MHz reference	0.02 Hz	Using a counter
Measurement	30 Hz to 3 GHz	2 parts in 10^8	Can be reported as elapsed time for repetitive events. 1/f .
Simulated Speed	5 km/h 10 km/h 30 km/h 60 km/h 100 km/h 200 km/h 500 km/h	0.023 km/h 0.024 km/h 0.028 km/h 0.039 km/h 0.057 km/h 0.11 km/h 0.27 km/h	Using a counter and GNSS Simulator to simulate speed and heading
Simulated Heading	0 ° to 359.9 °	0.019 °	
END			

Appendix - Calibration and Measurement Capabilities

Introduction

The definitive statement of the accreditation status of a calibration laboratory is the Accreditation Certificate and the associated Schedule of Accreditation. This Schedule of Accreditation is a critical document, as it defines the measurement capabilities, ranges and boundaries of the calibration activities for which the organisation holds accreditation.

Calibration and Measurement Capabilities (CMCs)

The capabilities provided by accredited calibration laboratories are described by the Calibration and Measurement Capability (CMC), which expresses the lowest measurement uncertainty that can be achieved during a calibration. If a particular device under calibration itself contributes significantly to the uncertainty (for example, if it has limited resolution or exhibits significant non-repeatability) then the uncertainty quoted on a calibration certificate will be increased to account for such factors.

The CMC is normally used to describe the uncertainty that appears in an accredited calibration laboratory's schedule of accreditation and is the uncertainty for which the laboratory has been accredited using the procedure that was the subject of assessment. The measurement uncertainty is calculated according to the procedures given in the GUM and is normally stated as an expanded uncertainty at a coverage probability of 95 %, which usually requires the use of a coverage factor of $k = 2$. An accredited laboratory is not permitted to quote an uncertainty that is smaller than the published measurement uncertainty in certificates issued under its accreditation.

Expression of CMCs - symbols and units

It should be noted that the percentage symbol (%) represents the number 0.01. In cases where the measurement uncertainty is stated as a percentage, this is to be interpreted as meaning percentage of the measurand.
Thus, for example, a measurement uncertainty of 1.5 % means $1.5 \times 0.01 \times q$, where q is the quantity value.

The notation Q[a, b] stands for the root-sum-square of the terms between brackets: $Q[a, b] = [a^2 + b^2]^{1/2}$