

Schedule of Accreditation

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United Kingdom Accreditation Service

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

 <p>0324</p> <p>Accredited to ISO/IEC 17025:2017</p>	<p style="text-align: center;">Transmille Ltd</p> <p style="text-align: center;">Issue No: 043 Issue date: 07 January 2025</p> <table border="1" style="width: 100%;"> <tr> <td style="width: 50%;"> Unit 4 Select Business Centre Lodge Road Staplehurst Kent TN12 0QW </td><td style="width: 50%;"> Contact: Mr M A Bailey Tel: +44 (0)1580 890700 Fax: +44 (0)1580 890711 E-Mail: sales@transmille.com Website: www.transmille.com </td></tr> </table>	Unit 4 Select Business Centre Lodge Road Staplehurst Kent TN12 0QW	Contact: Mr M A Bailey Tel: +44 (0)1580 890700 Fax: +44 (0)1580 890711 E-Mail: sales@transmille.com Website: www.transmille.com
Unit 4 Select Business Centre Lodge Road Staplehurst Kent TN12 0QW	Contact: Mr M A Bailey Tel: +44 (0)1580 890700 Fax: +44 (0)1580 890711 E-Mail: sales@transmille.com Website: www.transmille.com		
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 CALIBRATION			
DC RESISTANCE			Using ratio techniques with reference to known resistance values. Both measurement and generation of these resistance values may be reported
Range values	0 Ω to 1 m Ω 1 m Ω to 10 m Ω 10 m Ω to 100 m Ω 100 m Ω to 1 Ω 1 Ω to 10 Ω 10 Ω to 100 Ω 100 Ω to 1 k Ω 1 k Ω to 10 k Ω 10 k Ω to 100 k Ω 100 k Ω to 1 M Ω 1 M Ω to 10 M Ω 10 M Ω to 100 M Ω 100 M Ω to 1 G Ω 1 G Ω to 10 G Ω 10 G Ω to 100 G Ω 100 G Ω to 1 T Ω	850 p Ω 0.85 $\mu\Omega/\Omega$ 0.80 $\mu\Omega/\Omega$ 0.60 $\mu\Omega/\Omega$ 0.50 $\mu\Omega/\Omega$ 0.70 $\mu\Omega/\Omega$ 0.65 $\mu\Omega/\Omega$ 0.36 $\mu\Omega/\Omega$ 0.45 $\mu\Omega/\Omega$ 14 $\mu\Omega/\Omega + 2.2 \Omega$ 20 $\mu\Omega/\Omega + 90 \Omega$ 510 $\mu\Omega/\Omega + 1.5 \text{ k}\Omega$ 0.58 % + 20 k Ω 0.41 % 1.6 % 0.58 % + 21 k Ω	The uncertainties are for resistors suitable for oil immersion or placing in an air bath at 18 to 28 °C. The quoted uncertainty may be increased for other types of resistor. Using digital multimeter. The uncertainties are for resistors suitable for placing in an air bath at 18 to 28 °C. The quoted uncertainty may be increased for other types of resistor.
Specific Values	1 Ω 10 k Ω 1 M Ω 10 M Ω 100 M Ω 1 G Ω 10 G Ω 100 G Ω 1 T Ω	310 n Ω 2.8 Ω 4.8 Ω 110 Ω 3.6 k Ω 140 k Ω 28 M Ω 520 M Ω 7.6 G Ω	Fixed value resistors are used for the generation of these values. Measurement of resistors is performed by comparison against these fixed value resistors.



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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks
ELECTRICAL CALIBRATION (continued)			
DC VOLTAGE			
Range values	0 mV to 10 mV 10 mV to 100 mV 100 mV to 1 V 1 V to 10 V 10 V to 100 V 100 V to 1 kV	440 nV 490 nV 1.5 $\mu\text{V/V}$ + 440 nV 1.6 $\mu\text{V/V}$ 1.8 $\mu\text{V/V}$ 2.0 $\mu\text{V/V}$	Both measurement and generation of these DC voltage values may be reported. Calibrations performed with digital multimeter/monitored voltage source.
Specific values	100 mV 1 V 10 V 100 V 1 kV	300 nV 1.1 μV 6.5 μV 110 μV 1.2 mV	Both measurement and generation of these DC voltage values may be reported. Calibrations performed using DC voltage standard and reference divider.
High Voltage	1 kV to 5 kV 5 kV to 40 kV	0.20 % + 5.0 V 0.25 % + 10 V	Calibrations performed using HV divider and digital multimeter. Measurement of these values can be performed over the full range; generation is limited to a maximum of 30 kV.
DC Current	0 A to 10 nA 10 nA to 100 nA 100 nA to 1 μA 1 μA to 10 μA 10 μA to 100 μA 100 μA to 1 mA 1 mA to 10 mA 10 mA to 100 mA 100 mA to 1 A 1 A to 10 A 10 A to 30 A 30 A to 100 A 10 A to 1500 A	0.30 % + 1.0 pA 40 $\mu\text{A/A}$ + 28 pA 21 $\mu\text{A/A}$ + 29 pA 15 $\mu\text{A/A}$ + 33 pA 4.3 $\mu\text{A/A}$ + 100 pA 4.5 $\mu\text{A/A}$ + 950 pA 3.6 $\mu\text{A/A}$ + 22 nA 4.4 $\mu\text{A/A}$ + 100 nA 7.6 $\mu\text{A/A}$ + 700 nA 53 $\mu\text{A/A}$ + 5.0 μA 60 $\mu\text{A/A}$ 190 $\mu\text{A/A}$ 0.23 % + 1.3 A	Both measurement and generation of these DC current values may be reported. Using voltage and resistance method. Both measurement and generation of these DC current values may be reported. Using digital multimeter and current shunt. Generation only. For the calibration of clamp-on ammeters and similar devices using a multi-turn coil technique.



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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks
ELECTRICAL CALIBRATION (continued) AC VOLTAGE Specific values			Using AC/DC transfer techniques. Both measurement and generation of these values may be undertaken.

The uncertainties shown relate to voltages and frequencies that lie within 10% of the specified values. For intermediate frequencies the quoted uncertainty will be the larger of the adjacent uncertainties. The uncertainties are presented in $\mu\text{V/V}$, relative to the nominal voltage.

Frequency (kHz)													
	0.01	0.023	0.04	0.206	1	10	20	50	100	200	500	1000	
Voltage (V)	0.002	2600	1900	1900	1900	1900	2000	1900	1900	2300	3000	5000	6000
	0.01	400	350	350	350	350	350	350	370	590	820	1400	1700
	0.02	330	220	180	180	180	180	180	240	500	750	1300	1500
	0.1	240	110	60	60	60	60	60	120	170	520	690	690
	0.2	230	95	48	48	48	48	48	120	180	500	700	700
	0.3	260	94	60	60	60	60	60	60	120	180	540	700
	0.5	260	94	60	60	60	60	60	120	120	520	700	700
	0.7	230	82	36	32	32	32	32	53	70	160	500	630
	1	220	71	38	23	23	23	23	49	60	130	500	520
	2	220	75	35	23	23	23	23	50	60	140	500	500
	5	220	72	32	20	20	20	20	48	60	140	500	
	10	220	71	38	28	28	28	28	49	60	140	500	
	20	220	70	35	26	26	26	26	50	60	140	140	
	50	220	72	34	30	30	30	30	60	78			
	100			39	39	39	39	39	77	83			
200	38			38	38	38	38	70	85				
500	50			50	50	50	52	78					
1000				36	36	36	36	36			72		

Other values	1 mV to 2.2 mV 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	1.8 mV/V + 2.1 μV 700 $\mu\text{V/V}$ + 2.3 μV 400 $\mu\text{V/V}$ + 2.3 μV 800 $\mu\text{V/V}$ + 3.0 μV 1.2 mV/V + 3.5 μV 2.5 mV/V + 5.0 μV 2.5 mV/V + 10 μV 3.5 mV/V + 10 μV	Using AC/DC transfer techniques. Unless otherwise stated below, both measurement and generation of these values may be undertaken.
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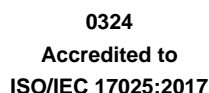
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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks
ELECTRICAL CALIBRATION (continued)			
AC VOLTAGE (continued)			
Other values (continued)	2.2 mV to 7 mV 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz 7 mV to 22 mV 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz 22 mV to 70 mV 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz 70 mV to 220 mV 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz 220 mV to 700 mV 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	600 $\mu\text{V/V} + 4.8 \mu\text{V}$ 400 $\mu\text{V/V} + 2.0 \mu\text{V}$ 220 $\mu\text{V/V} + 2.2 \mu\text{V}$ 400 $\mu\text{V/V} + 3.0 \mu\text{V}$ 630 $\mu\text{V/V} + 3.5 \mu\text{V}$ 1.4 mV/V + 5.0 μV 1.5 mV/V + 10 μV 2.6 mV/V + 10 μV 330 $\mu\text{V/V} + 2.0 \mu\text{V}$ 220 $\mu\text{V/V} + 2.0 \mu\text{V}$ 120 $\mu\text{V/V} + 2.2 \mu\text{V}$ 230 $\mu\text{V/V} + 2.9 \mu\text{V}$ 350 $\mu\text{V/V} + 3.3 \mu\text{V}$ 940 $\mu\text{V/V} + 4.5 \mu\text{V}$ 1.0 mV/V + 10 μV 12 mV/V + 10 μV 290 $\mu\text{V/V} + 1.8 \mu\text{V}$ 150 $\mu\text{V/V} + 1.8 \mu\text{V}$ 70 $\mu\text{V/V} + 2.3 \mu\text{V}$ 150 $\mu\text{V/V} + 2.6 \mu\text{V}$ 300 $\mu\text{V/V} + 3.1 \mu\text{V}$ 580 $\mu\text{V/V} + 5.4 \mu\text{V}$ 780 $\mu\text{V/V} + 9.0 \mu\text{V}$ 1.3 mV/V + 9.0 μV 240 $\mu\text{V/V} + 2.2 \mu\text{V}$ 95 $\mu\text{V/V} + 2.2 \mu\text{V}$ 45 $\mu\text{V/V} + 2.2 \mu\text{V}$ 80 $\mu\text{V/V} + 2.5 \mu\text{V}$ 190 $\mu\text{V/V} + 3.3 \mu\text{V}$ 290 $\mu\text{V/V} + 5.3 \mu\text{V}$ 470 $\mu\text{V/V} + 8.0 \mu\text{V}$ 1.2 mV/V + 10 μV 240 $\mu\text{V/V} + 2.2 \mu\text{V}$ 87 $\mu\text{V/V} + 2.2 \mu\text{V}$ 38 $\mu\text{V/V} + 1.7 \mu\text{V}$ 59 $\mu\text{V/V} + 3.1 \mu\text{V}$ 90 $\mu\text{V/V} + 4.0 \mu\text{V}$ 210 $\mu\text{V/V} + 4.0 \mu\text{V}$ 340 $\mu\text{V/V} + 12 \mu\text{V}$ 1.1 mV/V + 6.0 μV	Using AC/DC transfer techniques. Unless otherwise stated below, both measurement and generation of these values may be undertaken.



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Assessment Manager: JW7



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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks
ELECTRICAL CALIBRATION (continued)			
AC VOLTAGE (continued)			
Other values (continued)	700 V to 1000 V 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	200 $\mu\text{V/V} + 20 \text{ mV}$ 100 $\mu\text{V/V} + 10 \text{ mV}$ 45 $\mu\text{V/V}$ 140 $\mu\text{V/V} + 16 \text{ mV}$ 580 $\mu\text{V/V}$	Using AC/DC transfer techniques. Generation of these values is limited to the frequency range 40 Hz to 20 kHz; measurements can be conducted over the full range.
AC High Voltage	At 50 Hz: 1 kV to 5 kV 5 kV to 28 kV	0.45 % + 5.0 V 0.80 % + 10 V	Calibrations performed using HV divider and digital multimeter. Measurement of these values can be performed over the full range; generation is limited to a maximum of 20 kV.
AC CURRENT	25 μA to 100 μA 40 Hz to 1 kHz	100 $\mu\text{A/A} + 2.0 \text{ nA}$	Measurement and generation of AC Current using voltage and resistance method.
	100 μA to 1 mA 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	250 $\mu\text{A/A} + 10 \text{ nA}$ 110 $\mu\text{A/A} + 15 \text{ nA}$ 170 $\mu\text{A/A} + 12 \text{ nA}$ 620 $\mu\text{A/A} + 10 \text{ nA}$	
	1 mA to 10 mA 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	270 $\mu\text{A/A} + 330 \text{ nA}$ 100 $\mu\text{A/A} + 220 \text{ nA}$ 170 $\mu\text{A/A} + 275 \text{ nA}$ 880 $\mu\text{A/A} + 120 \text{ nA}$	
	10 mA to 20 mA 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	220 $\mu\text{A/A} + 800 \text{ nA}$ 100 $\mu\text{A/A} + 400 \text{ nA}$ 170 $\mu\text{A/A} + 500 \text{ nA}$ 640 $\mu\text{A/A} + 300 \text{ nA}$	
	20 mA to 50 mA 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	220 $\mu\text{A/A} + 1.6 \mu\text{A}$ 100 $\mu\text{A/A} + 0.80 \mu\text{A}$ 170 $\mu\text{A/A} + 1.2 \mu\text{A}$ 600 $\mu\text{A/A}$	
	50 mA to 100 mA 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	220 $\mu\text{A/A} + 4.0 \mu\text{A}$ 100 $\mu\text{A/A} + 2.0 \mu\text{A}$ 170 $\mu\text{A/A} + 2.5 \mu\text{A}$ 350 $\mu\text{A/A} + 2.5 \mu\text{A}$	
	100 mA to 200 mA 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	220 $\mu\text{A/A} + 9.0 \mu\text{A}$ 90 $\mu\text{A/A} + 7.0 \mu\text{A}$ 170 $\mu\text{A/A} + 6.0 \mu\text{A}$ 360 $\mu\text{A/A} + 5.0 \mu\text{A}$	



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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty ($k = 2$)	Remarks
ELECTRICAL CALIBRATION (continued)			
AC CURRENT (continued)	200 mA to 500 mA 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	220 μ A/A + 25 μ A 110 μ A/A + 10 μ A 170 μ A/A + 25 μ A 360 μ A/A + 20 μ A	Measurement and generation of AC Current using voltage and resistance method.
	500 mA to 1 A 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	240 μ A/A + 20 μ A 100 μ A/A + 20 μ A 170 μ A/A + 25 μ A 360 μ A/A + 20 μ A	
	1 A to 2 A 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	240 μ A/A + 60 μ A 100 μ A/A + 40 μ A 170 μ A/A + 50 μ A 360 μ A/A + 50 μ A	
	2 A to 10 A 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz	270 μ A/A 110 μ A/A 180 μ A/A	
	10 A to 30 A 10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 10 kHz	260 μ A/A 150 μ A/A 200 μ A/A	
AC Current simulation	40 Hz to 400 Hz 10 A to 1500 A	0.25 % + 1.3 A	Generation only. For the calibration of clamp-on ammeters and similar devices using a multi-turn coil technique.
AC LOOP IMPEDANCE	At 50 Hz: 0.2 Ω to 0.6 Ω 0.6 Ω to 1.6 Ω 5.5 Ω to 100 Ω 1 k Ω	22 m Ω 24 m Ω 42 m Ω 5.8 Ω	Nominal impedance values for the calibration of earth loop testers.
INDUCTANCE			
Specific Values	1 kHz 10 μ H 100 μ H 1 mH 10 mH 100 mH 1 H	17 nH 29 nH 330 nH 3.2 μ H 29 μ H 270 μ H	Generation using inductors of known value; measurement of inductance using LCR meter. Specific values are those that fall within 1 % of the stated values.
Other values	10 μ H to 100 μ H 100 μ H to 1 mH 1 mH to 10 mH 10 mH to 100 mH 100 mH to 1 H	0.81 % 0.49 % 0.34 % + 1.0 μ H 0.31 % + 10 μ H 0.30 % + 100 μ H	Measurement using LCR meter. Generation of values within this range, in a 1-2-5 sequence, may also be undertaken by comparison with the LCR meter.



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Measured Quantity Instrument or Gauge	Range	Expanded Measurement Uncertainty (<i>k</i> = 2)	Remarks	
ELECTRICAL CALIBRATION (continued)				
CAPACITANCE				
Specific Values, Three-terminal configuration	1 kHz 10 pF 100 pF 1 nF	0.38 fF 7.1 fF 63 fF	Generation using capacitors of known value; measurement of capacitance using capacitance bridge. Specific values are those that fall within 1 % of the stated values.	
Specific Values Two- and three-terminal configurations	1 kHz 10 nF 100 nF 1 μF	1.3 pF 12 pF 130 pF		
Specific Values Four Terminal Configuration	100 Hz, 120 Hz 10 μF 100 μF 1 mF 10 mF	32 nF 320 nF 3.4 uF 110 uF		
	1 kHz 10 uF 100 uF 1 mF	34 nF 340 nF 3.9 uF	Generation using capacitance multiplier standard; measurement of capacitance using LCR meter. Specific values are those that fall within 1 % of the stated values.	
Other Values	10 Hz to 99 Hz 1 nF to 10 nF 10 nF to 10 mF	0.78 % 0.31 %		
	100 Hz to 999 Hz 1 nF to 10 nF 10 nF to 100 μF 100 μF to 1 mF 1 mF to 10 mF	0.4 % + 1 pF 640 μF/F 0.34 % 0.78 %		
	1 kHz 10 μF 100 μF 1 mF	0.050 % + 0.20 pF 0.12 % 0.36 %	Value and Frequency combinations are limited	
FREQUENCY				
Reference value	10 MHz	2.2 in 10 ¹⁰		Using GPS receiver, synthesisers and frequency counter. The 10 MHz claim is for an average frequency over a 10 minute period. Uncertainties will be increased for shorter periods.
Other values	10 mHz to 1 GHz	2.4 in 10 ⁸	Values within this range may also be reported as average periodic time (1/ <i>f</i>) for electronically triggered repetitive events.	



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ELECTRICAL CALIBRATION (continued)			
TIME INTERVAL	20 ms to 900 ms	390 μ s	For the calibration of RCD testers
PHASE ANGLE			Measurement via Phase Meter, Generation using monitored multiproduct calibrator
Voltage : Current	40 Hz to 1 kHz -180° to +180°	20 m°	Voltage range 1 V to 1000 V Current range 1 mA to 30 A
Voltage : Voltage	40 Hz to 1 kHz -180° to +180°	20 m°	
AC Power	40 Hz to 400 Hz Cos $\phi = 1$ Cos $\phi = 0.5$ Lead to 0.5 lag Cos $\phi = .025$ lead to 0.25 lag	0.13 % 0.25 % 1.2 %	Measurment using precision power meter, generation using monitored multiproduct calibrator
TEMPERATURE INDICATORS AND SIMULATORS			
Reference junction measurements	Ambient 18 °C to 28 °C	0.12 °C	Using calibrated PRT sensor and meter.
Thermocouple type			By electrical simulation, including reference junction compensation
K	-200 °C to -100 °C -100 °C to -25 °C -25 °C to +120 °C 120 °C to 1000 °C 1000 °C to 1370 °C	0.41 °C 0.31 °C 0.29 °C 0.35 °C 0.40 °C	



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ELECTRICAL CALIBRATION (continued)			
TEMPERATURE INDICATORS AND SIMULATORS (continued)			
Thermocouple type			
J	-210 °C to -100 °C	0.37 °C	By electrical simulation, including reference junction compensation.
	-100 °C to -30 °C	0.28 °C	
	-30 °C to +150 °C	0.30 °C	
	150 °C to 760 °C	0.30 °C	
	760 °C to 1200 °C	0.34 °C	
N	-200 °C to -100 °C	0.56 °C	
	-100 °C to -25 °C	0.35 °C	
	-25 °C to +120 °C	0.32 °C	
	120 °C to 410 °C	0.31 °C	
	410 °C to 1300 °C	0.38 °C	
R	0 °C to 250 °C	1.0 °C	
	250 °C to 1000 °C	0.65 °C	
	1000 °C to 1760 °C	0.72 °C	
S	0 °C to 250 °C	0.99 °C	
	250 °C to 1000 °C	0.62 °C	
	1000 °C to 1700 °C	0.68 °C	
T	-250 °C to -150 °C	0.74 °C	
	-150 °C to 0 °C	0.28 °C	
	0 °C to 120 °C	0.28 °C	
	120 °C to 400 °C	0.29 °C	
B	600 °C to 800 °C	2.0 °C	
	800 °C to 1000 °C	2.0 °C	
	1000 °C to 1550 °C	1.9 °C	
	1550 °C to 1820 °C	1.9 °C	
E	-250 °C to -100 °C	0.63 °C	
	-100 °C to -25 °C	0.28 °C	
	-25 °C to +350 °C	0.29 °C	
	350 °C to 1000 °C	0.31 °C	
L	-200 °C to -100 °C	0.47 °C	
	-100 °C to +800 °C	0.43 °C	
	800 °C to 900 °C	0.44 °C	
U	-200 °C to 0 °C	0.55 °C	
	0 °C to 600 °C	0.43 °C	
C	0 °C to 150 °C	0.44 °C	
	150 °C to 650 °C	0.40 °C	
	650 °C to 1000 °C	0.45 °C	
	1000 °C to 1800 °C	0.60 °C	
	1800 °C to 2316 °C	0.83 °C	



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ELECTRICAL CALIBRATION (continued) TEMPERATURE INDICATORS AND SIMULATORS (continued) Thermocouple type			
K	-270 °C to -200 °C -200 °C to +1372 °C	0.66 °C 0.050 °C	By electrical simulation, excluding reference junction compensation.
J	-210 °C to +1200 °C	0.050 °C	
N	-270 °C to -200 °C -200 °C to +1300 °C	0.16 °C 0.080 °C	
R	0 °C to 1760 °C	0.12 °C	
S	0 °C to 1760 °C	0.12 °C	
T	-250 °C to -200 °C -200 °C to +400 °C	0.17 °C 0.050 °C	
B	600 °C to 1820 °C	0.11 °C	
E	-270 °C to -200 °C -200 °C to +1000 °C	0.32 °C 0.040 °C	
L	-200 °C to +900 °C	0.040 °C	
U	-200 °C to +600 °C	0.050 °C	
C	0 °C to 2316 °C	0.060 °C	
Resistance Thermometer PT 100	-100 °C to +800 °C	0.020 °C	By comparison with equivalent DC resistance values.
END			



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Calibration performed at main address only

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: $Q[a, b] = [a^2 + b^2]^{1/2}$