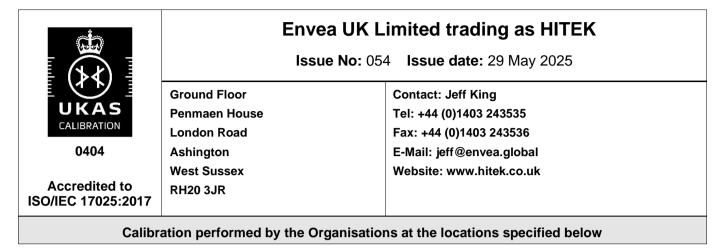
# **Schedule of Accreditation**

issued by

**United Kingdom Accreditation Service** 

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



## Locations covered by the organisation and their relevant activities

## Laboratory locations:

Location details		Activity	Location code
Address Ground Floor Penmaen House London Road Ashington West Sussex RH20 3JR	<b>Local contact</b> Mr Jeff King Tel: +44 (0)1403 243535	Electrical Time	Р

## Site activities performed away from the locations listed above:

Location details		Activity	Location code
Calibrations may be performed in a mobile laboratory that is taken to the customers' sites, or in suitable areas within the customers' premises. The customers' premises must be appropriate for the nature of the particular calibrations undertaken and will be the subject of contract review arrangements between the laboratory and the customer.	Contact as above	Electrical Time	S

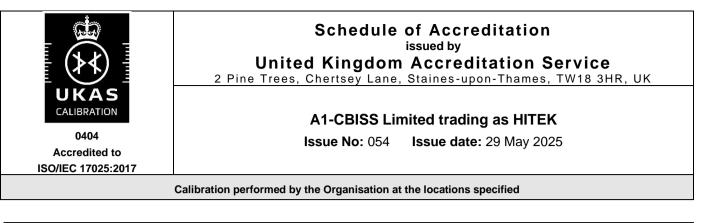
	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK
UKAS CALIBRATION	A1-CBISS Limited trading as HITEK
0404 Accredited to ISO/IEC 17025:2017	Issue No: 054 Issue date: 29 May 2025
	Calibration performed by the Organisation at the locations specified

Calibration and Measurement Capability (CMC)

Measured Quantity Instrument or Gauge	Range	Expanded Uncertainty ( <i>k</i> = 2)	Remarks	Location Code
ELECTRICAL DC Voltage	0 mV to 120 mV 120 mV to 1.2 V 1.2 V to 12 V 12 V to 12 V 12 V to 120 V 120 V to 1050 V	6.0 μV/V + 1.0 μV 6.0 μV/V + 2.0 μV 6.0 μV/V + 15.5 μV 7.5 μV/V + 120.5 μV 12.5 μV/V + 2.5 mV	Electrical calibrations are performed by comparison with a reference standard measuring the output of instruments or generating the output, as stated.	P & S P & S P & S P & S P & S
DC Resistance	1 kV to 50 kV 0 Ω to 10 Ω 10 Ω to 100 Ω 100 Ω to 1 kΩ 1 kΩ to 10 kΩ 10 kΩ to 100 kΩ 100 kΩ to 1 MΩ 1 MΩ to 10 MΩ 10 MΩ to 10 MΩ 100 MΩ to 1 GΩ 1 GΩ to 10 GΩ	$\begin{array}{c} 0.47 \ \% \\ 15 \ \mu\Omega/\Omega \ + \ 250 \ \mu\Omega \\ 20 \ \mu\Omega/\Omega \ + \ 500 \ \mu\Omega \\ 16 \ \mu\Omega/\Omega \ + \ 3m\Omega \\ 12 \ \mu\Omega/\Omega \ + \ 3m\Omega \\ 12 \ \mu\Omega/\Omega \ + \ 6 \ m\Omega \\ 12 \ \mu\Omega/\Omega \ + \ 20.5 \ m\Omega \\ 20 \ \mu\Omega/\Omega \ + \ 155 \ m\Omega \\ 54 \ \mu\Omega/\Omega \ + \ 22 \ \Omega \\ 332 \ \mu\Omega/\Omega \ + \ 70 \ \Omega \\ 0.35 \ \% \ + \ 125.5 \ \Omega \\ 0.24 \ \% \end{array}$	Using high voltage divider. Voltage and current method; applied voltages in the range 100 V to 500 V.	P P&S P&S P&S P&S P&S P P &S P
	20 Hz to 1 kHz 1 mV to 10 mV 10 mV to 100 mV 100 mV to 1 V 1 V to 10 V 10 V to 10 V 100 V to 100 V	0.20 % + 3.5 µV 286 µV/V + 6.5 µV 286 µV/V + 40 µV 195 µV/V + 1.0 mV 192 µV/V + 5.5 mV 225 µV/V + 31 mV		P&S P&S
	1 kHz to 20 kHz 1 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 1000 V 20 kHz to 100 kHz 100 mV to 1 V 1 V to 10 V 1 V to 10 V	0.25 % + 1.5 $\mu$ V 188 $\mu$ V/V + 5.0 $\mu$ V 286 $\mu$ V/V + 37 $\mu$ V 190 $\mu$ V/V + 0.50 mV 190 $\mu$ V/V + 4.5 mV 503 $\mu$ V/V + 31 mV 230 $\mu$ V/V + 37 $\mu$ V 385 $\mu$ V/V + 0.50 mV 372 $\mu$ V/V + 4.5 mV		P&S
	10 V to 100 V 1000 V to 30 kV <i>50 Hz</i>	372 μV/V + 4.5 mV 1.5 %	Using high voltage divider.	Ρ

UKAS CALIBRATION 0404 Accredited to ISO/IEC 17025:2017	Schedule of Accreditation issued by United Kingdom Accreditation Service 2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK		
	A1-CBISS Limited trading as HITEK Issue No: 054 Issue date: 29 May 2025		
Calibration performed by the Organisation at the locations specified			

Measured Quantity Instrument or Gauge	Range	Expanded Uncertainty ( <i>k</i> = 2)	Remarks	Location Code
DC Current	100 nA to 1 $\mu$ A 1 $\mu$ A to 10 $\mu$ A 10 $\mu$ A to 100 $\mu$ A 0.1 mA to 100 $\mu$ A 0.1 mA to 10 mA 1 mA to 10 mA 10 mA to 100 mA 100 mA to 1 A 1 A to 10 A 10 A to 100A 10 A to 110A 110A to 1100A	79 μA/A + 28 pA 23 μA/A + 95 pA 22 μA/A + 1.0 nA 23 μA/A + 5.5 nA 31 μA/A + 0.50 μA 36 μA/A + 1.0 μA 45 μA/A + 16 μA 0.18 % 0.30 % + 0.0050 A 0.80 % +0.15 A 0.80 %	Using multi turn coil method; for the calibration of clamp- on ammeters.	P & S S S S S S S P & & S S S S S S S S
AC Current	40 Hz to 1 kHz 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	0.050 % + 21 nA 0.050 % + 156 nA 0.10 % + 1.5 μA 0.050 % + 12 μA 0.050 % + 500 μA 0.38 %		P & S P & S P & S P & S P & S P & S
	100 Hz 10 A to 20 A	0.050 % + 5.0 mA	Generation only	P & S
	<i>45 Hz to 65 Hz</i> 10 A to 110 A 110 A to 1100 A	0.80 % +0.30 A 1.1 %	Using multi turn coil method; for the calibration of clamp- on ammeters.	P & S P & S
Frequency	0.01 Hz to 0.1 Hz 0.1 Hz to 10 kHz 10 kHz to 1 MHz 1 MHz to 10 MHz 10 MHz to 20 GHz	1.5 μHz/Hz 1.2 μHz/Hz 1.5 μHz/Hz 0.15 μHz/Hz 0.030 μHz/Hz		Ρ
Temperature indicators and simulators, calibration by electrical simulation			Simulated using equivalent DC voltages.	
Base metal thermocouple	-200 °C to +1600 °C	0.20 °C	Excluding cold junction compensation	Р
Cold junction compensation	At 0 °C	0.030 °C	These are supplementary measurements for monitoring temperature and can be reported on UKAS certificates to assure the operation of the thermocouple.	P&S
Resistance thermometer (Pt 100)	-200 °C to +800 °C	0.020 °C	Simulated using known values of resistance that correspond to the stated temperatures.	Ρ
	EN	ND		



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