



# Time Electronics

## Decade Boxes Ordering Information

<b>1040</b> .....	<b>RESISTANCE BOX (1Ω to 100MΩ)</b>
9026.....	Carrying Case
9028.....	Protective Rubber Boot (unit supplied with this as standard)
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1041</b> .....	<b>RESISTANCE BOX LOW OHM (0.01Ω to 1kΩ)</b>
9026.....	Carrying Case
9028.....	Protective Rubber Boot (unit supplied with this as standard)
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1049</b> .....	<b>PT100 SIMULATOR HANDHELD (CLASS A °C)</b>
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1050</b> .....	<b>PT100 SIMULATOR HANDHELD (CLASS A °F)</b>
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1051</b> .....	<b>RESISTANCE BOX LOW OHM (0.01Ω to 1MΩ)</b>
9026.....	Carrying Case
9028.....	Protective Rubber Boot (unit supplied with this as standard)
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1061</b> .....	<b>RESISTANCE BOX LOW COST (1Ω to 1.2MΩ)</b>
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1065</b> .....	<b>RESISTANCE BOX - POWER 10W (0.1Ω to 100kΩ)</b>
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1067</b> .....	<b>RESISTANCE BOX PRECISION LOW OHM (10mΩ to 10kΩ)</b>
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1068</b> .....	<b>PRECISION FIXED RESISTANCE BOX (1Ω to 10kΩ)</b>
C164.....	Factory Calibration Certificate (NPL traceable)
C141.....	UKAS Calibration Certificate (ISO 17025)
<b>5069</b> .....	<b>INSULATION TESTER CALIBRATOR (decade resistance 100kΩ to 100GΩ)</b>
C189.....	Factory Calibration Certificate (NPL traceable)
C112.....	UKAS Calibration Certificate (ISO 17025)
<b>1070</b> .....	<b>CAPACITANCE BOX (100pF to 10μF)</b>
9026.....	Carrying Case
9028.....	Protective Rubber Boot (unit supplied with this as standard)
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1071</b> .....	<b>CAPACITANCE BOX (10pF to 100μF)</b>
9026.....	Carrying Case
9028.....	Protective Rubber Boot (unit supplied with this as standard)
C161.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)
<b>1053</b> .....	<b>INDUCTANCE BOX (1mH to 10H)</b>
C170.....	Factory Calibration Certificate (NPL traceable)
C114.....	UKAS Calibration Certificate (ISO 17025)

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***Time Electronics***  
*Calibration, Test and Measurement*

# Decade Boxes

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Resistance • Capacitance • Inductance

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# Decade Boxes

Resistance, Capacitance, and Inductance



## 1051 – 8 Decade Low Ohm Resistance Box

Range / Resolution: ..... 0 to 1MΩ / 0.01Ω steps

Decade	0.01Ω	0.1Ω	1Ω	10Ω	100Ω	1kΩ	10kΩ	100kΩ
Accuracy	± 10%	± 5%	± 1%	± 0.5%	± 0.1%	± 0.1%	± 0.1%	± 0.1%
Max Current	1A	1A	1A	0.3A	0.1A	33mA	10mA	3mA

Residual Resistance: ..... Less than 90mΩ

Power Rating: ..... 1 watt per resistor

Voltage Rating: ..... Maximum 250V DC/AC RMS

Temperature Coefficient: ..... 50ppm/°C

Dimensions / Weight: ..... w215 x H100 x D120mm / 1kg (incl. protective boot)

Features: ..... Colour coded digits, safety terminals, and protective rubber boot



## 1040 – 8 Decade Wide Range Resistance Box

Range / Resolution: ..... 0 to 100MΩ / 1Ω steps

Decade	1Ω	10Ω	100Ω	1kΩ	10kΩ	100kΩ	1MΩ	10MΩ
Accuracy	± 1%	± 0.5%	± 0.1%	± 0.1%	± 0.1%	± 0.1%	± 0.1%	± 1%
Max Current	0.5A	0.3A	100mA	30mA	3mA	0.3mA	30μA	3μA

Residual Resistance: ..... Less than 250mΩ

Power Rating: ..... 1 watt per resistor

Voltage Rating: ..... Maximum 250V DC/AC RMS

Temperature Coefficient: ..... 50ppm/°C

Dimensions / Weight: ..... w215 x H100 x D120mm / 1kg (incl. protective boot)

Features: ..... Colour coded digits, safety terminals, and protective rubber boot



## 1041 – 5 Decade Low Ohm Resistance Box

Range / Resolution: ..... 0 to 1kΩ / 0.01Ω steps

Decade	0.01Ω	0.1Ω	1Ω	10Ω	100Ω
Accuracy	± 10%	± 5%	± 1%	± 0.5%	± 0.1%
Max Current	1A	1A	1A	0.3A	0.1A

Residual Resistance: ..... Less than 60mΩ

Power Rating: ..... 1 watt per resistor

Voltage Rating: ..... Maximum 100V DC/AC RMS

Temperature Coefficient: ..... 50ppm/°C

Dimensions / Weight: ..... w215 x H100 x D120mm / 1kg (incl. protective boot)

Features: ..... Colour coded digits, safety terminals, and protective rubber boot



## 1061 – 6 Decade Resistance Box

Range / Resolution: ..... 0 to 1.2MΩ / 1Ω steps

Accuracy: ..... ± 1%

Residual Resistance: ..... Less than 150mΩ

Power Rating: ..... 0.75 watt per resistor

Voltage Rating: ..... Maximum 300V DC/AC RMS

Dimensions / Weight: ..... w355 x H63 x D82mm / 0.75kg

Features: ..... Slim line design and front panel safety terminals



### 1067 – 6 Decade Precision Resistance Box

Range / Resolution: ..... 0 to 12k $\Omega$  / 10m $\Omega$  steps  
 Accuracy: .....  $\pm$  0.01%  
 Residual Resistance: ..... Less than 10m $\Omega$ . Less than 1m $\Omega$  variation  
 Power Rating: ..... 0.35 watt per resistor  
 Stability: ..... 20ppm/year (>1 $\Omega$ ), 100ppm/year (<1 $\Omega$ )  
 Voltage Rating: ..... Maximum 200V DC/AC RMS  
 Insulation: ..... Case to resistance terminals 2kV / 50Hz maximum  
 Temperature Coefficient: ..... 10ppm/ $^{\circ}$ C (20ppm/ $^{\circ}$ C below 1 $\Omega$ )  
 Dimensions / Weight: ..... w355 x H63 x D89mm / 1.1kg  
 Contacts: ..... Make before break – silver alloy



### 1065 – 6 Decade Power Resistance Box

Range / Resolution: ..... 0 to 120k $\Omega$  / 0.1 $\Omega$  steps  
 Accuracy: .....  $\pm$  5% (0.1 $\Omega$ ),  $\pm$  1% (1 $\Omega$  to 120k $\Omega$ )  
 Residual Resistance: ..... Less than 20m $\Omega$   
 Power Rating: ..... 10 watt per resistor  
 Voltage Rating: ..... Maximum 500V DC/AC RMS  
 Temperature Coefficient: ..... 200ppm/ $^{\circ}$ C  
 Dimensions / Weight: ..... w390 x H80 x D150mm / 2kg  
 Features: ..... Ventilated robust metal case and multi-wafer switches for low switch contact resistance



### 1070 – 7 Decade Capacitance Box

### 1071 – 7 Decade Capacitance Box

1070 Range / Resolution: ..... 0 to 10 $\mu$ F / 100pF steps  
 1070 Residual Capacitance: ..... Less than 38pF  
 1071 Range / Resolution: ..... 0 to 100 $\mu$ F / 10pF steps  
 1071 Residual Capacitance: ..... Less than 50pF  
 Accuracy: ..... 1% (5% above 10 $\mu$ F – 1071)  
 Voltage Rating: ..... Maximum 300V DC, 200V AC  
 Dimensions / Weight: ..... w215 x H100 x D120mm / 1kg (incl. protective boot)  
 Features: ..... Bi-polar working, colour coded digits, safety terminals, and protective rubber boot



### 1053 – 4 Decade Inductance Box

Range / Resolution: ..... 0 to 10H / 1mH steps  
 Accuracy at 1kHz: ..... 3% of setting  
 Voltage Rating: ..... Maximum 30V AC  
 Maximum Current: ..... 150mA  
 Residual Resistance: ..... Less than 0.2 $\Omega$   
 Residual Inductance: ..... Less than 1 $\mu$ H  
 Dimensions / Weight: ..... w248 x H62 x D102mm / 0.8kg  
 Features: ..... Robust metal case and front panel safety terminals

