



Time Electronics established decade boxes, configured into CalBench modules for use in electronics, R&D, education and process applications. Each module is designed specifically for CalBench, with decades positioned centrally and terminals underneath for simple connection and operation. The 7001 is a dedicated Pt100 simulator for temperature applications.

Features

- Module versions of TE decade boxes
- Resistance, capacitance & inductance models
- Suitable for industry and education
- Resistance boxes for PT100 simulation
- Colour coded digits
- Safety terminals
- Module design with terminals under decades

Specifications

1040B – 8 Decade Resistance Box Module

Range / Resolution 0 to 100 M Ω / 1 Ω steps.

Decade	1 Ω	10 Ω	100 Ω	1 k Ω	10 k Ω	100 k Ω	1 M Ω	10 M Ω
Accuracy	$\pm 1\%$	$\pm 0.5\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 1\%$
Max current	0.5 A	0.3 A	100 mA	30 mA	3 mA	0.3 mA	30 μ A	3 μ A

Residual resistance Less than 250 m Ω .
 Power rating 1 watt per resistor.
 Voltage rating Maximum 250 V DC/AC RMS.
 Temperature coefficient 50 ppm/ $^{\circ}$ C.
 Features Colour coded digits, safety terminals.

1041B – 5 Decade Resistance Box Module

Range / Resolution 0 to 1 k Ω / 0.01 Ω steps.

Decade	0.01 Ω	0.1 Ω	1 Ω	10 Ω	100 Ω
Accuracy	$\pm 10\%$	$\pm 5\%$	$\pm 1\%$	$\pm 0.5\%$	$\pm 0.1\%$
Max current	1 A	1 A	1 A	0.3 A	0.1 A

Residual resistance Less than 60 m Ω .
 Power rating 1 watt per resistor.
 Voltage rating Maximum 100 V DC/AC RMS.
 Temperature coefficient 50 ppm/ $^{\circ}$ C.
 Features Colour coded digits, safety terminals.

1051B – 8 Decade Resistance Box Module

Range / Resolution 0 to 1 M Ω / 0.01 Ω steps.

Decade	0.01 Ω	0.1 Ω	1 Ω	10 Ω	100 k Ω	1 k Ω	10 k Ω	100 k Ω
Accuracy	$\pm 10\%$	$\pm 5\%$	$\pm 1\%$	$\pm 0.5\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$	$\pm 0.1\%$
Max current	1 A	1 A	1 A	3.0 A	0.1 A	33 mA	10 mA	3 mA

Residual resistance Less than 90 m Ω .
 Power rating 1 watt per resistor.
 Voltage rating Maximum 250 V DC/AC RMS.
 Temperature coefficient 50 ppm/ $^{\circ}$ C.
 Features Colour coded digits, safety terminals.

7001 Class A $^{\circ}$ C Pt100 Simulator Module

Range -200 $^{\circ}$ C to +800 $^{\circ}$ C with 23 set points
 Basic Accuracy $\pm 0.3\%$
 Temperature Coefficient Less than 30 ppm/ $^{\circ}$ C
 Maximum Current 50 mA
 Features ITS-90 IEC60751, exceeds class A, safety terminals
 $^{\circ}$ F version available -100 $^{\circ}$ F to 1000 $^{\circ}$ F, $\pm 0.5\%$ accuracy

1070B – 5 Decade Capacitance Box Module 1071B – 7 Decade Capacitance Box Module

1070 Range / Resolution 0 to 10 μ F / 100 pF steps
 1070 Residual Capacitance Less than 38 pF
 1071 Range / Resolution 0 to 100 μ F / 10 pF steps
 1071 Residual Capacitance Less than 50 pF
 Accuracy 1% (5% above 10 μ F – 1071)
 Voltage Rating Maximum 300 V DC, 200 V AC
 Features Bi-polar working, colour coded digits, safety terminals

1053 – 4 Decade Inductance Box

Range / Resolution 0 to 10 H / 1 mH steps
 Accuracy at 1 kHz 3% of setting
 Voltage Rating Maximum 30 V AC
 Maximum Current 150 mA
 Residual Resistance Less than 0.2 Ω
 Residual Inductance Less than 1 μ H
 Features Rotary switch decades, safety terminals

Ordering Information

1040B Resistance Box Module (1 Ω - 100 M Ω)
 1041B Resistance Box Low Ohm Module (0.01 Ω - 1 k Ω)
 1051B Resistance Box Low Ohm Module (0.01 Ω - 1 M Ω)
 1053B Inductance Box Module (1 mH - 10 H)
 1070B Capacitance Box Module (100 pF - 10 μ F)
 1071B Capacitance Box Module (10 pF - 100 μ F)
 7001 Pt100 Simulator Module

Due to continuous development Time Electronics reserves the right to change specifications without prior notice.