Time Electronics
1051 Resistance Decade Box



Description

A precision low ohm resistance box designed for general laboratory work including platinum resistance thermometry. The 1051 is compact and durable, housed in a robust metal case with removable protective rubber cover, making it ideal for use in either the laboratory or field. Excellent accuracy is achieved by using high stability metal film resistors. The 8-digit thumbwheel switch enables simple and precise setting with a clear indication of the resistance value.

Switch Contacts: Special attention has been given to the reliability of operation. A special multiple gold contact arrangement ensures low contact resistance and continued operation even if a contact fails.

Clear Visual Indication: To make selecting and reading the setting easy the 1051 incorporates colour coded digits: kilohms - red, ohms - white, milliohms - yellow.

Safety Terminals: Compatible with 4 mm shrouded plugs, as well as standard plugs, bare wires, and spade terminals.

Added Protection: The 1051 comes fitted with an ergonomic rubber cover providing increased protection and durability. It has a textured grip for comfortable handling and side openings to place labels. It is easy to remove if the user prefers a stand-alone unit or to house the 1051 in the optional 9026 carry case.

Features

- 0.01 Ω to 1 MΩ
- High accuracy
- Simple operation with clear visual indication
- High stability
- Low temperature coefficient
- Safety terminals
- Removable protective cover
- Robust and durable for lab, workshop or field use

Common Applications

- Calibration of resistance in measuring devices
- Pt100 simulation for checking RTD transmitters
- Select-on-test resistance substitution in circuit design
- Educational understanding of Ohm's Law

Specifications

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

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

Residual resistance.....Less than 90 mΩ.

Power rating.....1 watt per resistor.

Voltage rating.....Maximum 250 V DC, 176 V AC RMS.

Temperature coefficient.....50 ppm/°C.

Dimensions / Weight.....W 215 x H 100 x D120 mm / 1 kg.

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

Ordering Information

1051.....**Resistance Decade Box**

9026.....Carry case

C161.....Traceable calibration certificate (Factory)

C114.....Accredited calibration certificate (ISO 17025)

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