



# 1043 Decade Resistance Box

- 0.1Ω – 10 M
- High accuracy and precision
- Clear visual indication
- High stability and low temperature coefficient
- Compact and robust.



## Introduction

The 1043 is a compact, robust and accurate decade resistance box designed to meet the needs of both industry and education. Housed in a robust metal case, the compact construction makes it easily portable. When in use in the laboratory, it takes up a minimum of bench space.

The high accuracy of the 1043 is achieved by means of high stability metal film resistors. Accuracy at low settings is determined by the switch contact resistance which has been kept to a minimum. Mid-scale accuracy is 0.1% or better. The thumbwheel switch selection of output resistance enables precise setting with a clear unambiguous indication.

Metal film resistors are used to obtain the high stability and low temperature coefficient. The temperature coefficient is typically better than 50 ppm per °C. Each resistor has a power rating of 1 watt.

It is imperative that the switch setting should be unambiguous in order to avoid misreading the set value. The possibility of misreading increases considerably as the number of digits is increased. To prevent misreading, the 1043 incorporates a unique colour coding system to divide the setting into 3 groups corresponding to ohms, kilohms and megohms. This feature makes the 1043 ideal for educational applications.

Special attention has been given to the problem of reliability of operation. A special multiple gold contact switch arrangement ensures that a back-up contact is always available to take over should a failure occur.

## Specification

**Resistance Range:** 0.1Ω To 10 M in 0.1Ω steps

ACCURACY							
0.1Ω	1Ω	10Ω	100Ω	1 KΩ	10 KΩ	100KΩ	1 MΩ
5%	± 1%	±0.5%	±0.1%	±0.1%	±0.1%	±0.1%	±0.1%

**Zero Residual Resistance :** less than 250 milliohms

**Power Rating :** 1 watt per resistor: Metal film resistors are employed throughout

**Temperature Coefficient:** 50 ppm per °C  
**Connections:** 4 mm terminals. A third terminal enables the case to be earthed or connected to either output.

**Construction.** The case is of robust metal construction finished in two-tone blue and black.

**Dimensions:** 110 x 75 x 200 mm

**Weight:** 0.6kg

**Optional Extras:** **Carrying Case** for field and industrial applications.

## Ordering Information

Description	Order Code
Decade Resistance Box	<b>1043</b>
Carrying Case	<b>9026</b>
N.P.L. Traceable Calibration Certificate	<b>9172</b>
UKAS Calibration Certificate	<b>9114</b>



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