



1053 Decade Inductance Box

Time Electronics

Calibration, Test & Measurement

- 1 mH to 10 H
- In-line read-out
- 3% Accuracy
- High stability
- Compact: 25 x 6 x 10 cm
- Fully Screened



The **1053** is a compact, robust and accurate decade inductance box suitable for filter design, experimental, general purpose substitution, and DC to DC converter design.

Inductance is set by four easy-to-read dials that are divided into 4 decades, and provide 1mH, 10mH, 100mH, and 1H steps. The maximum setting is 11.11H.

Its custom wound, high permeability ferrite cores ensure insignificant influence from external magnetic fields and maximum stability.

The 1053 is housed in a fully screened robust metal case. The front panel safety terminals are compatible with 4mm shrouded plugs, as well as standard plugs, bare wires, and spade terminals.

1053 Technical Specifications

Inductance Range:	1mH to 10H (4 decades)
Accuracy at 1kHz:	3% of setting
End Resistance:	Less than 0.2Ω
End Inductance:	Less than 1uH
Max current per decade:	30mA (1mH), 70mA (10mH), 100mA (100mH), 150mA (1H)
Average resistance per step:	0.1Ω (1mH), 0.5Ω (10mH), 3.4Ω (100mH), 20.5Ω (1H)
Typical Q Factor at 1kHz:	75 (1mH), 175 (10mH), 280 (100mH), 250 (1H)
Max. Voltage:	30V AC rms (non-switching). Subject to max current rating.

General Specification

Dimensions:	24.5 L x 6.2 W x 10 H cm
Weight:	0.8kg
Optional Extras:	Calibration Certificates – traceable to NPL and UKAS

Ordering Information

Code	Description
1053	Decade Inductance Box
9170	Factory (NPL Traceable) Calibration Certificate
9114	UKAS Calibration Certificate (ISO 17025)

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

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