

The 1492 model is an excellent choice for an accurate decade inductance substituter with a wide range.

It is suitable for most laboratory and test applications.



1492 Decade Inductance Substituter

Features:

- 7 decade switches ranging from 1 μH to 1 H increments
- Toroidal ferrite core inductors
- High-accuracy: $\pm(1\% + 0.75 \mu\text{H})$
- Ideal for calibration of handheld and other LCR meters

SPECIFICATIONS

Inductance per step	Total decade inductance	dc resistance per step	Representative Q Values			Typical Frequency Response	Max. Current (mA)
			at 100 Hz	at 1 kHz	at 10 kHz		
1 μH	10 μH	0.02 Ω	0.026	0.20	2.00	300 Hz - 2 MHz	700
10 μH	100 μH	0.07 Ω	0.110	1.10	10.3		
100 μH	1 mH	0.2 Ω	0.340	3.40	30.0		
1 mH	10 mH	0.8 Ω	0.310	3.03	23.7	300 Hz - 1 MHz	500
10 mH	100 mH	4 Ω	2.76	18.6	70.4	300 Hz - 800 kHz	300
100 mH	1 H	48 Ω	1.29	12.6	90.6	300 Hz - 200 kHz	100
1 H	10 H	85 Ω	6.80	51.0	81.2	200 Hz - 20 kHz	20

Inductor type:

Toroidal-core inductors for small mutual inductance and minimal effects from external fields

Range:

0 to 11.111 11 H in 1 μH steps, controlled by seven in-line readout dials

Accuracy:

$\pm(1\% + 0.75 \mu\text{H})$
at 1 kHz, 100 mV, 23°C, tested with Model 1689 Digibridge, Series circuit

Stability:

$\pm 0.5\%$ per year

Zero inductance:

< 0.75 μH

Terminals:

Two 5-way, gold-plated, tellurium-copper binding posts with low thermal emf and low resistance, plus one binding post connected to case for shielding.

Switch type:

Multiple solid silver contacts.
To allow continuous rotation, a blank position is added on all decades.

Environmental conditions:

Operating conditions:
10°C to 40°C; <70% RH
Storage: -40°C to 70°C

Mechanical:

Dimensions: 43.9 cm W x 8.9 cm H x 10.2 cm D (17.3" x 3.5" x 4")
Weight: 2.4 kg (5.3 lb)

ORDERING INFORMATION

1492 Decade Inductance Substituter

Accessories Included:

Instruction Manual
Z540 calibration certificate traceable to SI

