

1413 Precision Decade Capacitor is a high-quality, high-accuracy, high-stability, wide-range standard. It is ideal for verification and calibration of LCR meters and multimeters.

Manufactured using the same design as the original GenRad 1413 Precision Decade Capacitor.



1413 Precision Decade Capacitor

For greater range and flexibility see the [HACS-Z Series](#)

Features

- Capacitance Range: 1 pF to 1.111 11 μF
- Base Accuracy: 0.05%
- Resolution: 6 digits
- Zero-Capacitance: <0.1 pF
- Stability: 100 ppm/year
- TC: <20 ppm/°C
- Rack mounting available
- Front and rear outputs available

SPECIFICATIONS:

Capacitance per step	Total decade capacitance	Accuracy*	Stability	Max Voltage	Dissipation factor*	Capacitor type
HACS-Z-1pF Variable Decade	1 pF+	±0.1 pF	±(100 ppm + 0.1 pF) per year	500 V peak max up to 10 kHz	<0.003 typical	Air Capacitors
1 pF	10 pF	±(0.05%+0.5 pF)			<0.002	
10 pF	100 pF				<0.002	
100 pF	1 nF				Position 1: <0.002 All others: <0.001	Silvered mica Mechanically stabilized Hermetically sealed
1,000 pF	10 nF				Position 1: <0.001 Position 2: <0.0005 All others: <0.0003	
0.01 μF	100 nF				<0.0003	
0.1 μF	1 μF				<0.0004	

*1 kHz, 3-terminal measurement; series model; 1 Vrms, 23°C; traceable to SI

No zero-subtraction required

Zero capacitance:

≤0.1 pF maximum capacitance obtained with all dials set to zero

Temperature coefficient:

<20 ppm/°C

Insulation resistance:

>50,000 MΩ

Environmental conditions:

Operating conditions: 10°C to 40°C

Storage conditions: -40°C to 70°C

Shielding:

Double-shielded construction; see below.

Dimensions:

Bench: 43.2 cm W x 13.3 cm H x 27.7 cm D (17" x 5.2" x 10.9")

Rack: 48.3 cm W x 13.3 cm H x 27.7 cm D (19" x 5.2" x 10.9")

Weight:

8.6 kg (19 lb), for bench version

Connection to capacitor:

Two bnc connectors labeled **HI** and **LO** are located on the front panel.



