

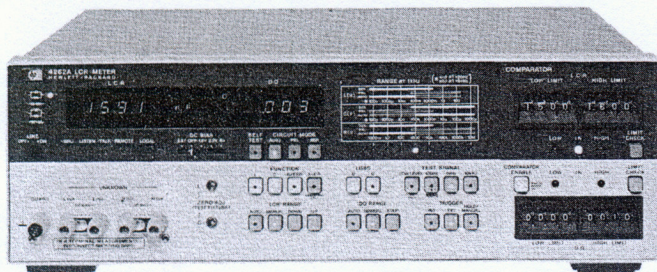
# COMPONENT MEASUREMENT

## Digital LCR Meters

### Models 4261A and 4262A

- Automatic balancing, ranging & circuit mode selection
- Test frequencies: HP 4261A, 120 (100) Hz and 1 kHz  
HP 4262A, 120 (100) Hz, 1 kHz and 10 kHz

- Versatile accessories and options
- High reliability



HP 4262A with Opt 004



HP 4261A

### Description

The HP 4261A and HP 4262A are 3½ digit LCR meters that meet today's requirements for component measurements. Both instruments feature fully automatic operation over wide measuring ranges. Simply select the measuring functions and one of the test frequencies, then insert the device to be measured. The instrument does the rest—automatically selecting the proper measuring range and equivalent circuit mode.

In addition to automatic measurements, the HP 4261A and HP 4262A provide high accuracy (0.2% reading), internal dc bias, and series and parallel equivalent circuit modes.

These relatively low cost and easy-to-use LCR meters are capable of a wide range of applications — measuring electrolytic/ceramic capacitors, filter coils, pulse transformers, internal resistance of dry cells and semiconductor junction capacitance, as well as ordinary LCR components. Extended features of these reliable instruments include optionally available HP-IB (HP 4262A) and BCD (HP 4261A) data output capabilities and a comparator option which is convenient for production line applications.

**Specifications** (refer to data sheet for complete specifications) Measurement ranges and accuracies: see table on this page. Accuracy applies over a temperature range of 23°C ± 5°C (at 0° to 55°C, error doubles). 10 kHz and Q specifications are given only for the HP 4262A.

	HP 4261A	HP 4262A
Parameters measured	L-D, C-D R	L-D • Q, C-D • Q R (ESR), ΔLCR
Display	3-1/2 digits max. display 1900	3-1/2 digits max. display 1999
Basic Accuracy	0.2%	
Test frequency	120(100) Hz, 1 kHz ± 3%	120(100) Hz, 1 kHz 10 kHz ± 3%
Test signal level (typical)	1 V, 50 mV (Cp mode only)	
DC bias	Int	1.5 V, 2.2 V, 6 V ± 5%, selectable
	Ext	0 to +30 V
Equivalent circuit modes	auto, parallel, series	
Ranging modes	LCR	auto, manual
	DQ	D only - fixed
Trigger	internal, external, manual	
Measuring terminal	5-terminal configuration	

**Deviation measurement (HP 4262A):** displays the difference between a stored value (that is, measured value when LCR switch is depressed) and subsequent measured data.

**Offset adjustments (HP 4262A):** front panel adjustments to compensate for stray capacitance (C: 0 to 10 pF) and residual inductance (L: 0 to 1 μH) of the test fixture.

**Self-test (HP 4262A):** automatically checks basic functions.

### General

**Measuring time (typical):** for a 1000 count measurement on a low loss component on a fixed range:

1 kHz, 10 kHz: C/L 220-260 ms, R 120-160 ms

120 (100) Hz: C/L 900 ms, R 700 ms

### Ranging Time

1 kHz, 10 kHz: 180 ms/range step

120 (100) Hz: 670 ms/range step

**Reading rate:** INT (internal trigger) approximately 30 ms between end of measurement cycle and start of the next cycle. EXT (external trigger) measuring cycle is initiated by a remote trigger input.

**Accessories available:** HP 16061A: test fixture, direct couple, 5-terminal; HP 16062A: test leads with alligator clips, 4-terminal (for low impedance measurements); HP 16063A: test leads with alligator clips, 3-terminal (for high impedance measurements).

### Ordering Information (HP 4261A \*1)

HP 4261A Digital LCR Meter

Opt 001: BCD Output (L/C/R and D simultaneously)

Opt 002: BCD Output (L/D, C/D, R alternately)

Opt 003: BCD Remote Control

Opt 010: 100 Hz Test Frequency

HP 16061A Test Fixture, Radial/Axial Lead devices

HP 16062A Test Leads, 4-wire

HP 16063A Test Leads, 3-wire

\*1: Options 001 and 002 are mutually exclusive.

### Ordering Information (HP 4262A \*2)

HP 4262A Digital LCR Meter

Opt 001: BCD Output

Opt 004: Digital Comparator

Opt 010: 100 Hz Test Frequency

Opt 101: HP-IB Interface

HP 16061A Test Fixture for Radial/Axial Lead Devices

HP 16062A Test Leads, 4-wire

HP 16063A Test Leads, 3-wire

\*2: Option combinations 101/001 and 101/004 cannot be ordered.