



LCR Meters & Impedance Measurement Products



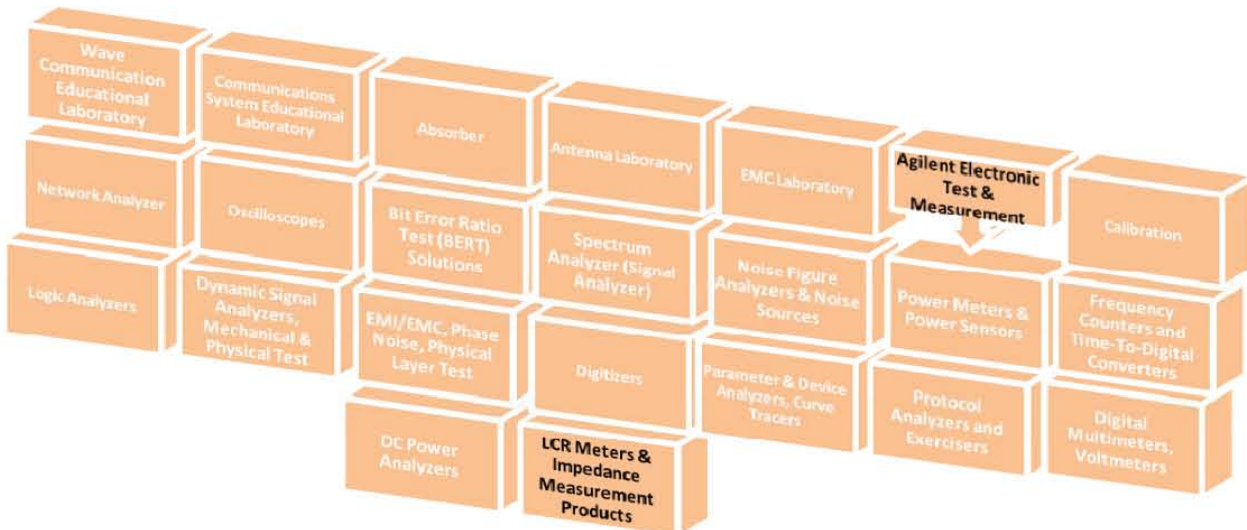
Agilent
LCR Meters, Impedance Analyzers
and Test Fixtures



Component and Material Measurement Solutions



Agilent Technologies



Impedance Analyzers

Impedance analyzers provide high measurement accuracy and sophisticated measurement functions:

- Frequency, DC bias, and AC voltage/current sweep capability lets you customize where and how test data will be taken.
- Built-in equivalent-circuit analysis computes a multi-element circuit model of the device under test.
- Color LCD/CRT can display multiple sets of measurement curves at the same time.
- Advanced calibration and compensation methods reduce measurement errors.



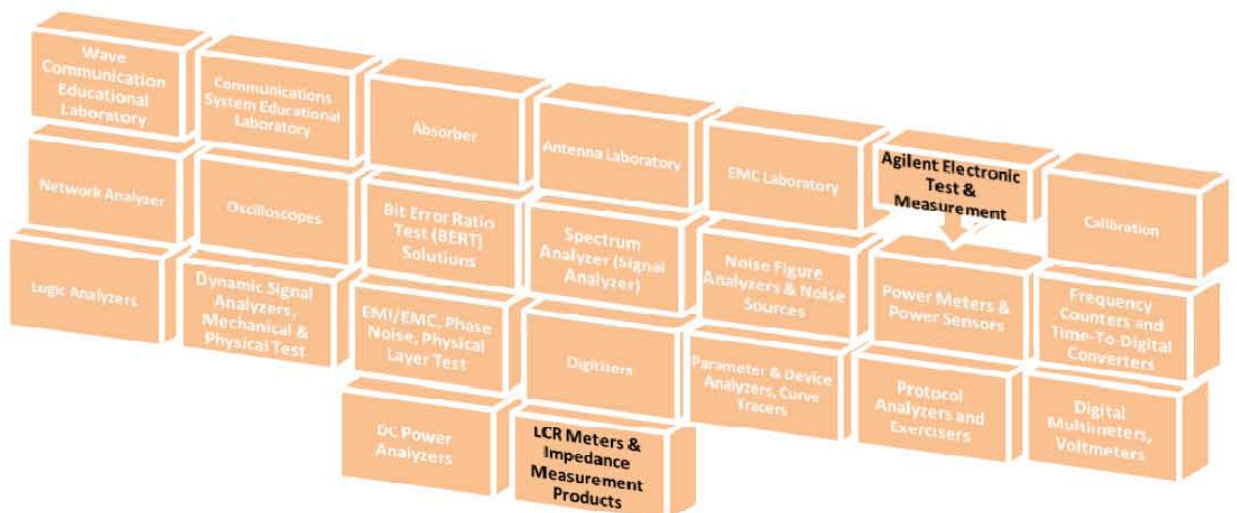
4294A precision impedance analyzer

- Highly accurate 4-terminal-pair impedance measurement in a wide frequency range of 40 Hz to 110 MHz. Extremely small variation in component characteristics can be precisely evaluated with sweep measurements of 0.08% basic accuracy.
- Best instrument for component evaluation like capacitors, inductors, resonators, semiconductors and for material evaluations like PC boards and toroidal cores. Improves evaluation efficiency with various measurement & analysis functions.
- In-circuit or grounded measurements with the 42941A Impedance Probe
- Built-in LAN interface
- Measurement parameters: $|Z|$, $|Y|$, θ , R, X, G, B, L, C, D, Q



E4991A RF impedance/material analyzer

- Provides top-of-the-line solution for measuring impedance from 1 MHz to 3 GHz, with an optional material-test function for measuring permittivity and permeability.
- Ideal instrument for RF surface mount inductors, capacitors, PC board materials and magnetic toroids.
- Measurement parameters: $|Z|$, $|Y|$, θ , R, X, G, B, C, L, D, Q
- Optional material parameters: ϵ , ϵ' , ϵ'' , μ , μ' , μ''
- Built-in LAN, GPIB interface



Test Fixtures and Accessories (Four-Terminal-Pair)

Basic test fixtures



16034E SMD/chip test fixture

Frequency: ≤ 40 MHz
Maximum dc bias: ±40 V



16034G small SMD/chip test fixture

Frequency: ≤ 110 MHz
Maximum dc bias: ±40 V



16034H SMD/chip test fixture

Frequency: ≤ 110 MHz
Maximum dc bias: ±40 V
Suitable for array-type devices



**16043-60011 test fixture
16043-60012 test fixture**

Frequency: ≤ 110 MHz
Maximum dc bias: ±40 V



16044A SMD Kelvin contact test fixture

Frequency: ≤ 10 MHz
Maximum dc bias: ±40 V



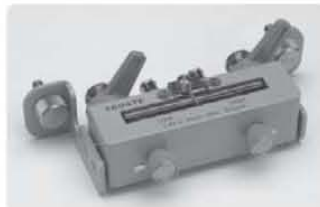
16334A SMD/chip tweezers

Frequency: ≤ 15 MHz
Maximum dc bias: ±42 V



16047A/D axial & radial test fixture

Frequency: A: ≤ 13 MHz, D: ≤ 40 MHz
Maximum dc bias: A: ±35 V, D: ±40 V



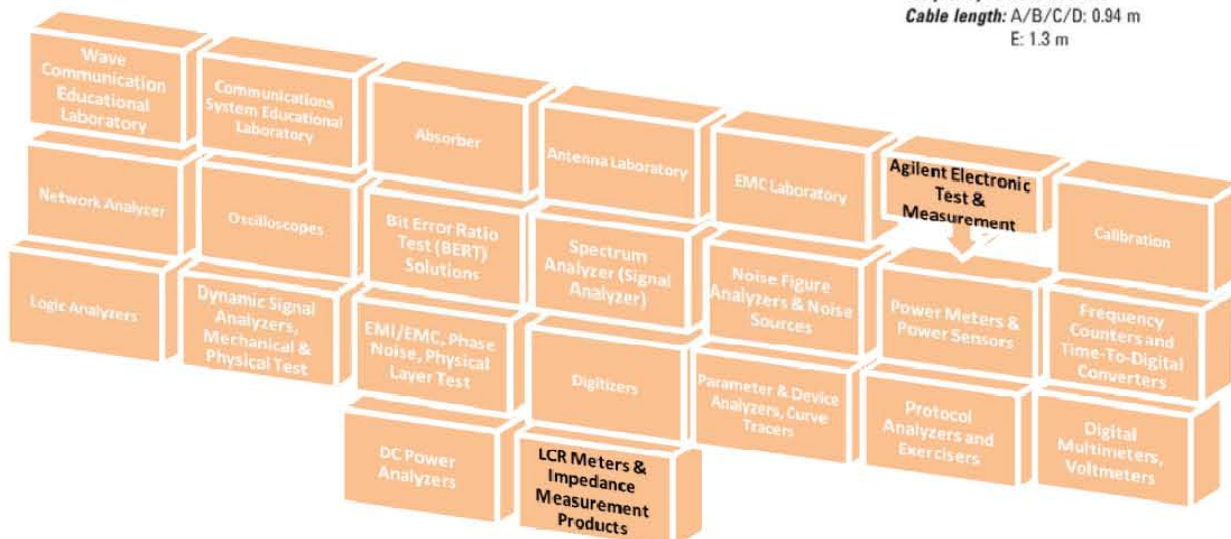
16047E test fixture

Frequency: ≤ 110 MHz
Maximum dc bias: ±40 V



16089A/B/C/D/E clip leads

Connector type: A/B/C/E: Kelvin
D: alligator
Frequency: 5 Hz to 100 kHz
Cable length: A/B/C/D: 0.94 m
E: 1.3 m



Test Fixtures and Accessories (Four-Terminal-Pair)

External DC bias fixtures



16065A axial and radial test fixture with safety cover
Frequency: 50 Hz to 2 MHz
Maximum externally supplied dc bias: ± 200 V
 Blocking capacitor of 5.6 μ F is connected in series with the Hc terminal



16065C external bias adapter
Frequency: 50 Hz to 1 MHz
Maximum externally supplied dc bias: ± 40 V
 Blocking capacitor of 50 μ F is connected in series with the Hc terminal

Test leads



16048A/D/E BNC test leads
Frequency: A: ≤ 30 MHz, D: ≤ 30 MHz, E: ≤ 1 MHz
Cable length: A: 0.94 m, D: 1.89 m, E: 3.8 m
Maximum dc bias: ± 40 V



16048-60030 SMC test leads
Frequency: ≤ 30 MHz
Cable length: 0.94 m
Maximum dc bias: ± 40 V
16033-60001: SMC male connector plate



16048G/H BNC test leads
Frequency: ≤ 110 MHz
Cable length: G: 1 m, H: 2 m
Maximum dc bias: ± 40 V
Use with only 4294A

Terminal adapters



42942A four-terminal-pair to 7 mm terminal adapter
Frequency: ≤ 110 MHz
Maximum dc bias: ± 40 V
Use with only 4294A



16085B four-terminal-pair to 7 mm terminal adapter
Frequency: ≤ 40 MHz
Maximum dc bias: ± 40 V

