DC ELECTRICAL CHARACTERIZATION FACILITY
(LCR Meter)

MODEL: HP 4192A LF Impedance Analyzer

INSTALLATION PLACE: DC Electrical Characterization Laboratory (room No14 new-building), Department of Microelectronics

DESCRIPTION:
The 4192A LF impedance analyzer performs both network analysis and impedance analysis on such devices such as telecommunication filters audio/video electronic circuits, and basic electronic components. Both floating and grounded devices can be tested.

SPECIFICATIONS

1. Measuring signal:
   Frequency range: 5Hz to 13MHz,Frequency step: 0.001Hz (5Hz to 10kHz), 0.01Hz (10kHz to 100kHz), 0.1Hz, (100kHz to 1MHz), 1Hz (1MHz to 13 MHz), Frequency accuracy: ±50ppm
2. Measurement Range:
   |Z|, R, X: 1.0000 Ω to 1.000 MΩ, 0.15%
   |Y|, G, B: 10.000 μS to 10.00 S, 0.15%
   C: 0.1 fF to 199 mF, 0.15%
   L : 0.01 nH to 1000 H, 0.27%
3. Voltage range: -35V to +35V, 0.5%, 10mV step (Internal DC bias)

APPLICATIONS

1. Gain phase measurement: Amplitude, phase, group delay
2. Impedance measurement / Impedance spectroscopy
3. Admittance measurements / Admittance spectroscopy
4. Semiconductor C-V evaluation
5. Coil Inductance measurement
6. Capacitors characterization
7. MIS device characterization (C-V-f, Conductance measurements)

CERTIFICATION/ACCREDITATION
The facility is not certified or accredited.

CONTACT: services@imel.demokritos.gr