

Component/Circuit Verification

ESA-E Series Portable Spectrum Analyzers

Features

- third order intercept: +12.5 dB
- ACPR 1st offset dynamic range: -67 dBc
- average displayed noise level: -153 dBm
- EVM modulation analysis
- 2G/3G multi-format RF power measurements
- flexible platform
- frequency coverage to 26.5 GHz
- seven measurement personalities

The Agilent ESA-E series spectrum analyzers with the modulation analysis measurement personality provide the flexibility of general-purpose spectrum analysis combined with the numerical and visual tools to help you quickly identify and quantify impairments to digitally modulated signals for all major cellular standards. Essentially, the ESA-E now provides you with spectrum and vector measurements in one tool, thus reducing your need for additional equipment, preserving measurement accuracy, and minimizing system development time.

The Agilent ESA-E series also offer quick and easy-to-use RF power measurements for all major 2G and 3G standards. The primary applications for the RF power measurements include handset power-amplifier research and development and base-station power-amplifier manufacturing in the 2G and 3G cellular

communications industry. The ESA offers one-button, format-specific setups including, channel power, occupied bandwidth, multi-offset ACPR, CCDF, harmonic distortion and burst power measurements.

The ESA-E offers the most expandable, most rugged platform available, and can tailor a spectrum analyzer to customers' specific needs – with the market's most scalable price and performance. The ESA-E series spectrum analyzer with seven measurement personalities (GSM/GPRS, cdmaOne, *Bluetooth*, modulation analysis, phase noise, cable fault location and CATV) represents an excellent-value, mid-performance spectrum analyzer with enough vector analysis to provide the configuration flexibility to ensure customers' products are brought to market quickly, at the lowest price.



Please visit our Web site at: www.agilent.com/find/esa

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E4991A RF Impedance/Material Analyzer

Features

- basic accuracy $\pm 0.8\%$
- 3GHz impedance direct read-out
- Windows-styled user interface
- sweep parameters (frequency, ac level, dc bias)
- built-in VBA programming function
- various test fixture for components
- data transfer through the LAN interface
- direct read-out permittivity, permeability [option]
- reliable on-wafer measurement [option]

The new Agilent E4991A RF impedance/material analyzer offers ultimate impedance measurement performance and powerful built-in analysis function. It will provide innovations in R&D of components and circuit designers who evaluate components in the range of 3 GHz. The E4991A uses an RF-IV technique, as opposed to the reflection measurement technique,

for more accurate impedance measurement over wide impedance range. Basic impedance accuracy is $\pm 0.8\%$. High Q accuracy enables low-loss component analysis. The internal synthesizer sweeps frequency from 1 MHz to 3 GHz with 1 MHz resolution.

