

# DYNAMIC ANALYSIS & VIBRATION TESTING

## 1250 SERIES...FREQUENCY RESPONSE ANALYZERS



The 1250 series Frequency Response Analyzers use the single sine correlation analysis technique to provide fast and precise measurement of the amplitude and phase characteristics of the device under test. The device can be stimulated with a sine, square or triangular waveform from the built-in generator. For self-excited devices, the 1250 can be synchronized to an external reference to determine the harmonically related response characteristics.

The 1250 covers a wide frequency range, from 10  $\mu$ Hz to 65 kHz. The correlation technique enables either rejection or analysis of the harmonic components of a non-linear system response and also the accurate measurement of signals, even when heavily contaminated with noise.

The 1250 contains two analysis channels, enabling the complex ratio of any two signals from a system to be determined. This is particularly suited to derivation of simple input/output relationships or the measurement of electrochemical impedance, when used in conjunction with the 1286 Potentiostat.

For multi-output systems the 1254 Analyzer provides simultaneous measurement on four channels. Additionally, both the 1250 and 1254 can be expanded in blocks of 8 channels to an

additional 32 parallel channels using 1251 Slave Analyzers. Multichannel operation is ideal for modal analysis of structures and condition monitoring of rotating machinery.

### FEATURES:

Frequency range	10 $\mu$ Hz to 65 kHz
Channels, 1250	Simultaneous measurement on 2 channels
Channels, 1254	Simultaneous measurement on 4 channels
Generator	Triangle, square, sine
Generator output	10 mV to 10 V
Measurement	1 $\mu$ V to 300 V

### 1251 Slave Analyzers

Channels for simultaneous measurement: 1 to 32  
Interface: Independent IEEE 488

### Options

Modulator/Demodulator for carrier systems  
Synchronizer system  
Auxiliary generators (0°, + 90°, + 180°)  
Analog plotter interface