



The compact 520 unit is ready to noise free acquisition under critical conditions thanks to a powerful software and a state-of-the-art conversion technique

Enter the top class, without paying the toll

The **Impedance Spectroscopy** technique greatly expands the application range of electrochemical measures and helps in defining the dynamic behaviour of reactions as well as identifying the relative contribution of two or more concurrent processes. So far, the premium to be paid to enter this arena was a significant amount of money and, sometimes, the need to change the whole measurement chain.

The new **520** versatile **Frequency Response Analyser** from **Materials Mates Italia** sets a new level of performance and flexibility at a price that makes its selection painless. Covering a wide frequency range (**10 μ Hz - 2 MHz**) with great accuracy (up to 0.1% amplitude, 0.05deg phase) the **520** interfaces with any potentiostat with analog I/O connections.

ZedScope, its dedicated software package, offers all the features needed for the most difficult tasks with an intuitive approach. Thanks to its architecture, the **520** will accept further software packages for pulsed techniques, soon available from **Materials Mates Italia**.

Upgrade now your equipment to Impedance Analysis and take a deeper look at your valued samples.

Contact us to find out more on the features, as well as on the ancillary equipment available.



System connection

Operating Mode	Frequency Response Analyser / Impedance (with a potentiostat)
Measuring configuration	2-channel analyser with internal generator
Input/Output BNC	Outer contact grounded

Generator

Frequency Range	10 μ Hz ÷ 2 MHz
Accuracy	+/- 0.05% of the desired frequency
Resolution	16-bit conversion

Output

Output Voltage	0V to 10V peak
Output impedance	50 ohm +/- 1%
Output resolution	50 μ V to 5 mV level-dependent
Output bias	+/- 5 V

Input channels

Number	2 single ended
Connectors	Dual grounded BNC
Voltage range	+/-100 μ V to +/-80 V DC+pk AC
Input range	Fully automatic auto-range from 200 mV to 80V
Input impedance	1 Mohm // 30 pF

Analyser (with ZedScope)

Amplitude accuracy	0.1 %
Phase accuracy	+/- 0.05 Deg. +/- 0.001 Deg. /Khz
Operating modes	Standard/fast/low noise/low freq. optimized
Basic Accuracy in impedance	0.1%

General

Communication Port	USB 2 miniature connections
Power supply	USB-powered
Power consumption	300 mA max (1.5 W)
Size & weight	280 x 212 x 78 mm (L x W x H); Kg 1

Accessories supplied

1	USB cable
3	1 mt BNC cables
1	CD-ROM with software and manuals
1	Impedance test box