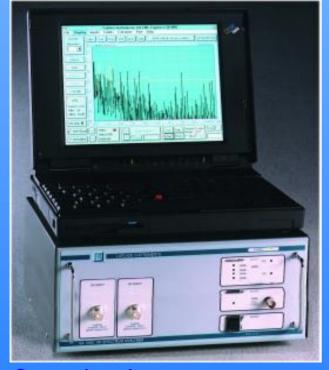
SA1002 EMC Analyser

Compliance EMC conducted and radiated measurements to 1GHz

- 10KHz—1GHz range to cover EN, FCC and international standards.
- Powerful PC software control and automation included.
- 200Hz RBW and Tracking Generator options.
- USB interface for very simple operation.
- Compact and simple to use whilst including all the necessary features for self testing your own products.



Comprehensive The SA1002 covers both conducted and radiated emissions testing from 10KHz to 1GHz. An optional 200Hz I.F. filter ensures fully compliant measurements covering ALL emissions including Band A (9KHz—150KHz).

Powerful This analyser and the associated software includes all the facilities required to perform accurate EMC measurements, even on non-compliant test sites

Convenience The SA1002 and associated ancillaries can eliminate the use of expensive and inconvenient test lab visits. The 'Self test and self certification' strategy avoids costly reworking of design and reduces 'time-to-market'.

Simplicity These systems are renowned for ease of operation. The software is outstanding in terms of flexibility and intuitive user interface.

The Laplace SA1002 EMC analyser provides an exceptionally powerful and cost effective tool for manufacturers and others who wish to measure EMC emissions from their products. When used with the RF9xx range of pre-selectors, accurate measurements even with conducted broadband emissions are obtained.

Entirely controlled from an intuitive Windows software package, the analyser can enable a self-test and self-certification strategy to be adopted with confidence. The software is a true Windows program which means that results can be easily transferred to printer and disk and to other applications such as Word and Excel. A full range of compatible accessories is available, including compact test cells and antennas, all fully calibrated to 3GHz.



LAPLACE INSTRUMENTS LTD

SA1002

SA1002 3GHz EMC analyser

Hardware

The SA1002 is an exceptionally well featured EMC analyser designed to match the requirements of all common EMC standards and includes.....

- 10KHz—1GHz frequency range
- 200Hz (opt), 9KHz, 120KHz and 1MHz RBW
- Peak, Quasi-peak and Average detectors
- Precision frequency measurement at all points in any scan.
- Instant zoom capability to any point in a scan.
- Audio demodulator (FM and AM)
- USB interface, just plug and go!
- Optional pre-selector for conducted emissions.
- Optional tracking generator output.

Software

Software is at the heart of any EMC test system. The Laplace RFemissions software is a fully integrated Windows compliant package. It not only directly controls all aspects of the analyser, it sets the test conditions such as input device, antenna correction and insertion loss. It also includes unique features which can cancel ambient signals, calibrate your radiated test site (in conjunction with an ERS) and provide instant zoom anywhere in the scan.

This software is specifically designed for ease of use by non-EMC expert staff, but retains many exceptionally advanced features.

Finally.....The Laplace range is fully supported worldwide. Helplines and lifetime software support are included for all our customers.

| Specification Hardware | | Software | |
|--|---|---|--|
| Frequency range | 10KHz—1GHz | Compatibility | Any PC running Win98 or later o.s. |
| Scan coverage | Continuous scan, no gaps on any range | Functions | Total control of all aspects of SA3000 |
| Zoom settings | Infinitely variable. | | operation, results display, saving to disk, printer output, and all EMC data processing. |
| Minimum zoom | <30MHz: 500KHz >30MHz: 10MHz Plus single frequency mode | Graphical scale, Vertical Horizontal | dBuV, dBm, dBuV/m, dBuA KHz, MHz,. Log or Linear mS or S (Single freq. Mode) |
| Sensitivity: | 2dBuV with pre-amplifier ON | Single freq. mode | Simultaneous plot of Pk, QP and Ave values vs |
| Flatness | ±3dB | | time. |
| Max RF input level | +3dBm | Traces | Current, Stored, Difference, Archive and Limits |
| Compression warning | Detector at input. | Pre-loaded Limits | EN55011/12/13/14/15/22/25 EN50081-1 and -2. |
| Spurious responses | <5dB above baseline | | FCC, As/NZ equivalents |
| Input protection | Diode clamped | Additional and User limits | Tabular entry field. Automatic interpolation |
| RBW | 200Hz (option), 9KHz, 120KHz | Antenna factor correction | Automatic |
| Input dynamic range | 70dB | Additional correction data | Tabular entry field. Automatic interpolation |
| RF attenuator | 0. 10, 20, 30dB | | against linear or log frequency axis. |
| Audio demodulator | Slope demodulator (FM and AM). Variable volume control. | Tabular listing | Up to 20 selected points. Real time display of Pk, QP and Ave values |
| Detectors | Peak, Quasi-peak and Average. | Cursor readout. | All trace values and freq. readout at cursor location. |
| Frequency accuracy | Better than 80ppm anywhere in scan. | Expert system | TestDirector mode provides full details of |
| Scanning Modes | Continuous scanning, single scan and single frequency mode, | | common standards and associated test techniques. |
| Optional tracking generator Frequency range | 10KHz—1GHz, locked to scan frequency | Data storage | Full data set with setup and limits with title and notes saved to user selected file. |
| Output level Control | -20dBm (87dBuV) nominal Via USB interface | Data retrieval | Traces and setups can be recalled in any combination. |
| Control software | Windows software included | Printer | Direct output to any Windows printer. |
| Connectors: | <1GHz, N type | Data Format | ASCII text, comma delimited |
| Power | 230V 50/60Hz 40W 115V factory set option | Order codes:SA1002Standard analyser with PC software.SA1002-AAs above, plus 200Hz RBW for Band A.SA1002-TGIncludes tracking generator option.SA1002-ATGIncludes both options. | |
| Physical | 30.5 x 27 x 14.5cm Weight: 5kg | | |
| Available from | | I APLACE INS | STRUMENTS LTD |

LAPLACE INSTRUMENTS LTD 3B Middlebrook Way, Cromer, Norfolk

NR27 9JR. UK Tel: +44 (0)1263 51 51 60 Fax: +44 (0)1263 51 25 32 Web site: <u>www.laplace.co.uk</u>

E-mail: tech@laplace.co.uk

