

CHARACTERISTICS

3 RMS voltage channels

- Simple set-up to select Phase-Phase (Delta) or Phase-Neutral recording.

Recorded parameters and events:

- Short (Pst) and long-term (Plt) flicker.
- Voltage Harmonics amplitudes up to 63th harmonic.
- Voltage Frequency measurement. Maximum, minimum and average frequency recording for every calculation period.
- Phase unbalance.
- Voltage dips and voltage peaks. Parameters: Duration, maximum or minimum voltage reached and exact time of the event.
- RMS profiles of Dips, Surges and Fast voltage variations
- Fast voltage variations
- RMS voltage profile recording for dips, voltage peaks and fast voltage variations.
- Voltage interruptions. Duration and time of event.
- Voltage transient detection with high-resolution waveform recording.

Additional features:

- Additional screw-on connectors on the back of the instrument for permanent installation.
- Optional GSM/GPRS Modem for remote operation

Included software:

- Display registered values in spreadsheet format
- Show registered values in graphic format
- Produces automatic printed reports
- Perform statistical calculations on acquired data, in order to verify compliance with power quality standards
- Export data in ASCII format.

MEDCAL/NT is an advanced power quality monitor, specifically designed for Power Quality studies. It is extremely easy to configure and set-up, with no external switches or settings. Covering the requirements of EN50160, it is the first three-phase monitor able to fully implement the recommendations of EN-50160 standard for fast voltage variations.

As an additional advantage, the RMS voltage profile can be stored whenever there is a RMS-related event: dip, voltage peak or fast voltage variation.

MEDCAL/NT also includes an advanced transient detection capability on the voltage channels. The high-resolution voltage waveform will be recorded whenever there is a voltage distortion on the instantaneous voltage.

MEDCAL/NT can store, under normal conditions, more than three months of recordings without external intervention. The absence of any mechanical elements makes the instrument extremely robust and reliable.

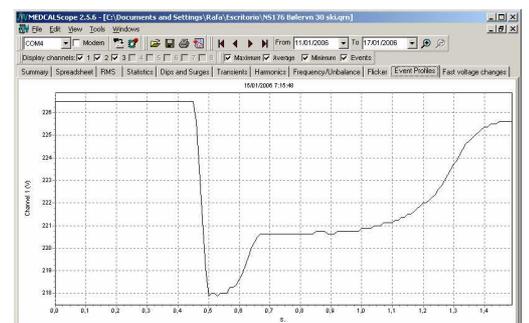
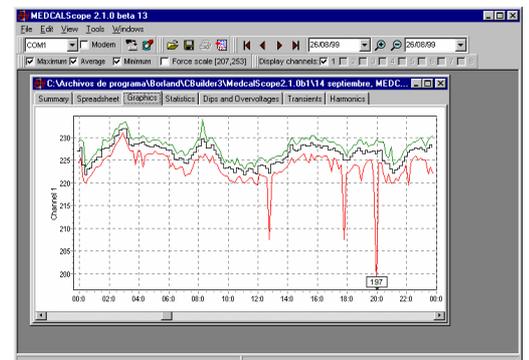
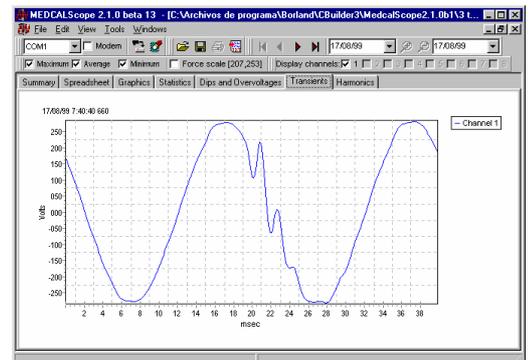
The included USB interface and cable allows direct communication with a personal computer. It is possible to connect a standard modem in order to operate a remote MEDCAL/NT.

The instrument is designed for both laboratory and permanent installation, and is provided with both front (4-mm banana) and rear (screw-type) connectors. Wall-fixing accessories are also supplied.

As an option, it is possible to include an internal GSM/GPRS modem for remote operation of the instrument.

With every MEDCAL/NT a copy of MEDCALScope PC software is included at no additional cost.

MEDCALScope allows a complete and exhaustive analysis of recorded data. It is possible to save the recorded data for later use, and export the data to other computer applications, as well as check compliance with power quality standards.



TECHNICAL SPECIFICATIONS

- **RMS Voltage Resolution:** 0.125 Volts
- **RMS Voltage Range:** 0 to 1000 Volts
- **RMS Voltage Precision:** 0.5% of end-of-scale
- **Instantaneous voltage resolution for transient recording:** 12 bits.
- **Measuring method:** True RMS calculation.
- **Harmonic amplitude precision:** 0.1% relative to fundamental.
- **Maximum harmonics recording order:** up to 63th harmonic
- **Frequency precision:** 0.02 Hz.
- **Frequency measurement range:** 48.4 to 51.6 Hz.
- **Sampling frequency:** 32 kHz per channel (640 samples/cycle at 50 Hz).
- **Internal Memory capacity:** More than 3 months under normal conditions.
- **Communication:** USB, 1.1 and 2.0 compatible
- **Internal clock precision:** 1 second / month
- **Power consumption:** 2 W
- **Weigh:** 400 g
- **Dimensions:** 220 x 145 x 50 mm.
- **Operating temperature:** -10 °C to + 65 °C
- **Relative humidity:** 0% to 90%

COMPUTER REQUIREMENTS

- PC compatible
- Pentium processor or higher
- 256 MB RAM Memory
- 3 MB free space on the Hard Drive
- One USB port
- Operating system: Windows 2000™ or Windows XP™

REGULATORY COMPLIANCE

- EN-55081 (part 1) Generic, Domestic and Light Industry emissions standard
- EN-60555 Harmonics and fluctuation emissions standard
- IEC-1000-4-1 Immunity against Voltage Dips and Interruptions.
- En-500082 (part 2) Generic, Commercial and Light Industrial immunity Standard
- EN-61010 Measurement, Lab and Control Equipment. Low Voltage Directive. Safety requirements: Cat II 600V

Your Distributor:

