11MAESTRO
Touch Screen, Single Channel, Power & Energy Monitor

Key Features

- **READS ALL HEADS**
  - Power: Thermopiles, Photo Detectors and Pyroelectrics
  - Energy: Thermopiles (in single shot mode), Photo Detectors and Pyroelectrics

- **LARGE TOUCH SCREEN COLOR LCD DISPLAY**
  - 5.6" Diagonal
  - 640 x 480 Resolution
  - 18bit Color
  - FULLY Touch Screen Controls

- **UNIQUE ERGONOMIC DESIGN**
  Great for both handheld and tabletop use, with improved rubber bands and quick stand for better stability

- **INTUITIVE USER INTERFACE**
  Easy to navigate interface, with many display features:
  - Single or Dual Graph Display
  - Instant access to the main functions
  - Function Search tool
  - Interface available in multiple languages

- **USB KEY ACCESS**
  Store data directly on a USB key

- **REAL-TIME STATISTICAL FUNCTIONS**
  Max, Min, Average, Standard Deviation, RMS and PTP Stability, Pulse # and Repetition Rate

- **AVAILABLE OUTPUTS**
  USB Key, Analog Output, RS-232, PC-USB, Ethernet

Connectivity
DUAL SCREEN DISPLAY

(Shown with Scope Display) With the Dual Screen mode, the 11MAESTRO really takes full advantage of its extra-large screen! Any display mode can be used in both single or dual display mode. In dual display mode, the Real Time display takes the upper portion of the screen, while any of the other displays (Scope, Needle, Averaging or Statistics) is set on the lower portion. The display in the lower portion can be easily changed using the parameters bar with drop-down menus in the center of the screen. You can also expand one of the displays to have it in Full Screen mode using the maximize button. Just as easily, you can go back to Dual Screen display by using the minimize button.

REAL TIME DISPLAY

This display shows the measured value in real time, with a corresponding bar graph below. The large size of the digits and high contrast of the graphics allow to see the measurement from a good distance. This mode is also always present in dual screen mode, in the upper portion of the screen.

- Very Large Digits
- Bar graph

SCOPE DISPLAY

With its line filling from the right of the screen, in a first-in/first-out manner, this display mode is a good approximation of an actual oscilloscope reading. Settings include time (x-axis) and range (y-axis). Basic statistics (can also be displayed directly on the screen.

- Oscilloscope-type graph
- On-screen, real time statistics (min, max and average)
- Fully customizable x and y axis

NEEDLE DISPLAY

Exactly like an analog needle, only faster! This mode is particularly useful when tuning a laser. The Real Time value is also displayed at the top of the screen.

- Ultra-fast readings
- Great for tuning
- Real Time value at the top of the screen
- Min and Max Values hold

AVERAGING DISPLAY

This very unique mode is perfect to show the trend of a laser over time. Set the number of points per batch and let the 11MAESTRO identify the minimum and maximum values of every batch. A yellow curve then follows the average of each batch, displayed as bars on the screen. The wider the difference between the white and blue portions of a bar (corresponding to the min and max values), the more unstable your laser is.

- Calculates the min, max and average values of batches of measurements
- Perfect to check laser stability over time
### Specifications

#### 11MAESTRO

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<td>Touch Screen 5.6in Color LCD</td>
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#### POWER METER SPECIFICATIONS

- **Power Range**
  - Thermopile: 1 μW to 30 kW
  - Photo Detector: 4 pW to 3 W
  - Monitor Accuracy: 0.25 % ± 5 μV best scale
- **Statistics**: Current Value, Max, Min, Average, Standard Deviation, RMS & PTP Stability, Time

#### ENERGY METER SPECIFICATIONS

- **Energy Range**: 30 fJ to 30 kJ
- **Monitor Accuracy**: ±1 % best scale
- **Software Trigger Level**: 0.1 to 99.9 %, 0.1 % resolution, default 2 %
- **Repetition Rate**: 2000 Hz / 10 000 Hz in sampling
- **Real Time Data Transfer (To USB Key)**: 2000 Hz
- **Statistics**: Current Value, Max, Min, Average, Std Dev., RMS & PTP Stability, Pulse #, Rep. Rate and Avg. Power

#### DETECTOR COMPATIBILITY

- Thermopile
- Photo Detector
- Pyroelectric

#### GENERAL SPECIFICATIONS

- **Interface Languages**: English, German, French and Japanese (Chinese to come)
- **Digital Display Size**: 112.9 x 86.7 mm LCD - 640 x 480 pixels
- **Real Time, Scope, Statistics, Digital Tuning Needle and Averaging**: 0-1 Volt, Full Scale, ±0.5 %
- **Rising Edge External Trigger**: TTL Compatible, 2-25 V @ 0.4 mA
- **Serial Commands Via**: USB (standard), Ethernet or RS-232 (cable in option)
- **Explicit Infrared**: USB key
- **Dimensions**: 210W x 122H x 45D mm
- **Weight (With Batteries)**: 0.67 kg
- **Battery Type**: 4x Rechargeable 1.2 V Ni-MH AA
- **Battery Life**: 6.5 hours
- **External Power Supply**: 100/240 VAC 50-60 Hz to 9 VDC 1.66 A

#### ORDERING INFORMATION

- **Product Name**: 11MAESTRO

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*Specifications are subject to change without notice*