

# READ THE LIGHT



LASER BEAM  
MEASUREMENT

**MIRO**  
by Gentec-EO

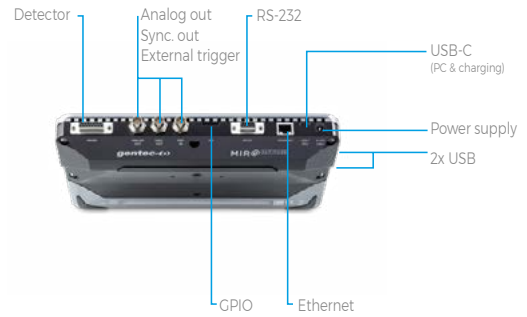
# MIRO ALTITUDE

Touchscreen, single-channel, laser power & energy meter

New product



## CONNECTIVITY



## KEY FEATURES

- **READS ALL HEADS**  
Power: thermopiles, photodetectors and pyroelectrics  
Energy: thermopiles (in SSE mode), photodetectors and pyroelectrics
- **LARGE TOUCHSCREEN DISPLAY**  
10in diagonal  
1280 x 800 resolution  
Touchscreen controls
- **INTUITIVE USER INTERFACE**  
Easy to navigate interface, with 3 display modes: scope, needle and bar chart.  
Instant access to the detector settings
- **REAL-TIME STATISTICAL FUNCTIONS**  
Max, min, average, standard deviation, RMS and PTP stability, and repetition rate
- **MULTIPLE OUTPUTS**  
Multiple USB ports for computer connection and charging (1x USB-C, 2x USB-A), BNC analog output, RS-232, Ethernet, programmable I/O (coming soon)

## ACCESSORIES



Additional 12V power supply



Power cord extension



USB-C wall charger (US only)



USB, RS-232 & BNC cables



Pelican carrying case

# MIRO ALTITUDE

## Specifications

CE NIST\*  
Traceable



\*Also traceable to NRC-CNRC




| MIRO ALTITUDE                      |   |
|------------------------------------|---|
| <b>DETECTOR TYPES</b>              | ALL MODELS: thermopiles, pyroelectrics, photodetectors  |
| <b>DISPLAY</b>                     | 10" high-resolution, anti-glare, touchscreen  |
| <b>POWER METER SPECIFICATIONS</b>  |   |
| Power range                        | 4 pW to 100 kW  |
| Meter accuracy                     | ±0.5% ± 3 µV from 20% to full scale   |
| Statistics                         | Current value, max, min, average, standard deviation, RMS & PTP stability, time                       |
| <b>ENERGY METER SPECIFICATIONS</b> |   |
| Energy range                       | 2 fJ to 30 kJ   |
| Meter accuracy                     | 1.0% ± 50 µV (< 500 Hz)<br>2.0% ± 50 µV (500 Hz to 10 kHz)  |
| Software trigger level             | 0.1 to 99.9%, 0.1% resolution, default 2%   |
| Repetition rate                    | 10 kHz for data acquisition in real time with time stamp, no missing point                            |
| Statistics                         | Current value, max, min, average, std dev., RMS & PTP stability, pulse #, rep. rate and average power |
| <b>DETECTOR COMPATIBILITY</b>      |   |
| Thermopile                         | Average power & single shot energy  |
| Photodetector                      | Average power & pulse energy  |
| Pyroelectric                       | Average power & pulse energy  |
| <b>GENERAL SPECIFICATIONS</b>      |   |
| Digital display size               | 10.1-inch diagonal LCD - 1280 x 800 pixels  |
| Outputs                            | Analog out, 0 - 2 V (BNC)<br>Sync out (BNC)<br>RS-232 (DB9)<br>Ethernet (RJ45)<br>USB-C<br>2x USB-A   |
| Rising edge external trigger       | 3.3-24 V (BNC)  |
| Serial commands via                | USB-C or RS-232   |
| Data storage via                   | Internal memory or USB key  |
| Battery type                       | Rechargeable Li-ion cell  |
| Battery life                       | 6 hours   |
| External power supply              | 9-24 VDC power supply included, or UBS-C (min 18 W)   |
| <b>PHYSICAL CHARACTERISTICS</b>    |   |
| Mounting holes                     | 1/4"-20 and 2x10-32 threaded holes  |
| Dimensions                         | 268W x 196H x 36D mm  |
| Weight                             | 1.36 kg   |
| <b>ORDERING INFORMATION</b>        |   |
| Compatible stand                   | Ask   |

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Specifications are subject to change without notice

# MIRO ALTITUDE

Main screen









Access the control center | Take a screenshot | Start a data-logging session | Display battery level | Display time

**1 NAVIGATION BAR**

The upper part of the screen includes a direct access to the control center, data acquisition buttons and various indicators (battery level and time).


**2 MEASUREMENT SETTINGS PANEL**

Use the various measurement settings available for your detector to set everything related to your measurement.

-  **Wavelength:** Enter your wavelength or choose from a list of recently used wavelengths
-  **Range:** Set the measuring range to autoscale or to one of the standard values
-  **Measurement mode:** Choose what you want to measure: power, SSE, moving average, irradiance, fluence, etc.
-  **Moving average:** Choose the desired moving average to use to plot the chart
-  **Trigger:** Enter the desired trigger level or choose from a list of recently used values
-  **XNR Anticipation™:** Toggle on to measure up to 10x-20x faster without losing any significant accuracy in your readings
-  **Correction:** Set a multiplier and an offset value for your measurements

**3 DISPLAY AREA**

The top part of the display area is the same for all three display modes.

-  **CLEAR:** Use this button to reset the statistics and erase the scope graph's data
-  **Display mode:** Toggle your display mode between: scope, needle and bar chart
-  **ZERO:** Set the current measured value to zero

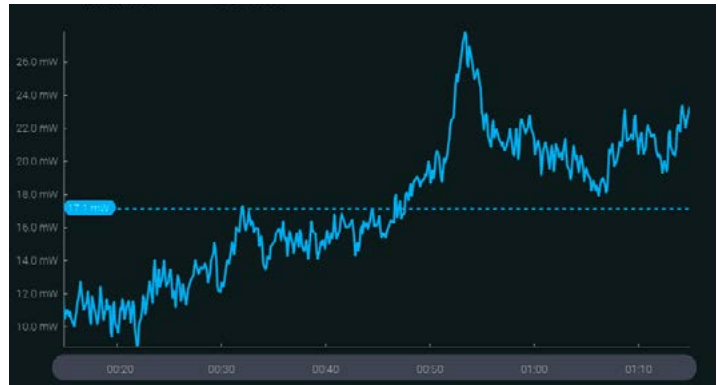
# MIRO ALTITUDE

Display modes

## SCOPE DISPLAY

With this display mode, you can travel in time using the time line at the bottom to view measurements at any point in time while MIRO ALTITUDE continues to measure.

The dotted blue line shows the average value.



## NEEDLE DISPLAY

Faster than an analog needle thanks to XNR Anticipation™! This mode is particularly useful when tuning a laser. The real-time value and statistics are always visible at the top of the screen.

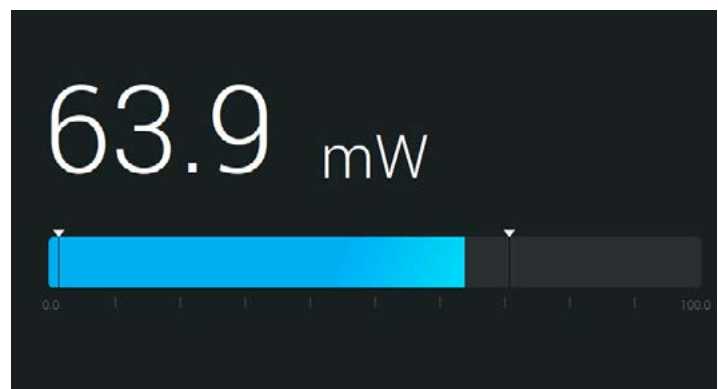
Arrows indicate the minimum and maximum measured values since the last reset. The zoom function sets these values as full scale of the digital gauge.



## BAR DISPLAY

This is the simplest display mode. Its main advantage is that the current measured value is displayed in huge size, allowing you to read the measurement from a good distance.

Arrows indicate the minimum and maximum measured values.



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# MIRO ALTITUDE

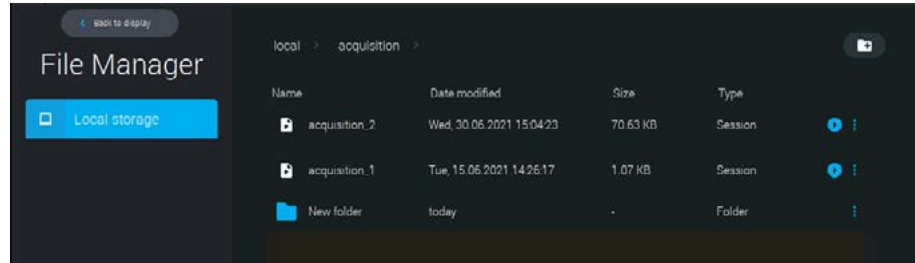
Settings & controls

## BUILT-IN FILE MANAGER AND DATA VIEWER

MIRO's built-in file manager lets you access and organize all your screenshots and recorded measurement sessions. You can also copy files on your USB key.

- ▶ Visualize a recorded measurement session with our built-in data viewer. Data will be displayed in the scope chart display.




There is also a built-in image viewer so you can view your screenshots directly on your MIRO ALTITUDE.



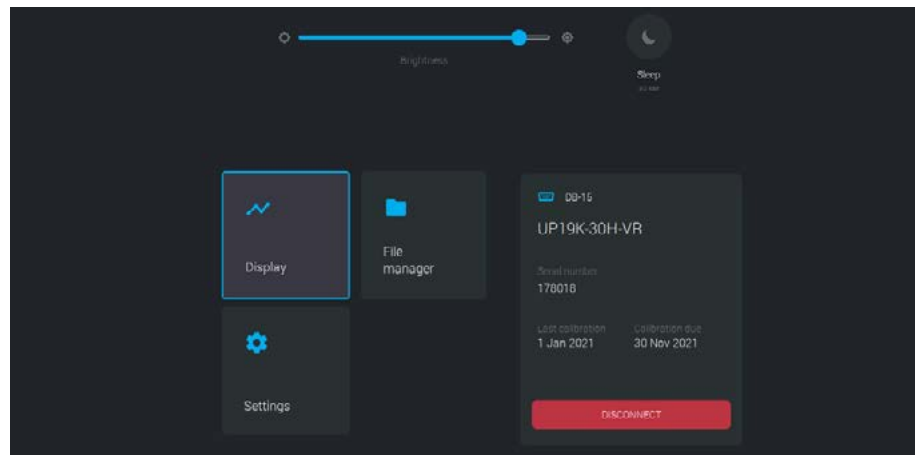
## CONTROL CENTER

The control center is accessible from all screens in the top left corner.

Easily navigate between the main screens of the app:

-  Display
-  File manager
-  Settings for the device.

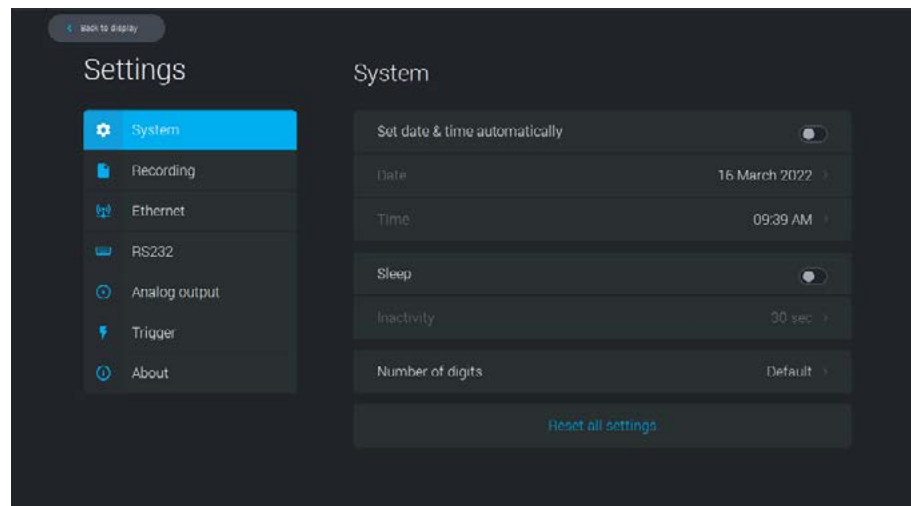
Connect/disconnect your Gentec-EO detector to MIRO ALTITUDE










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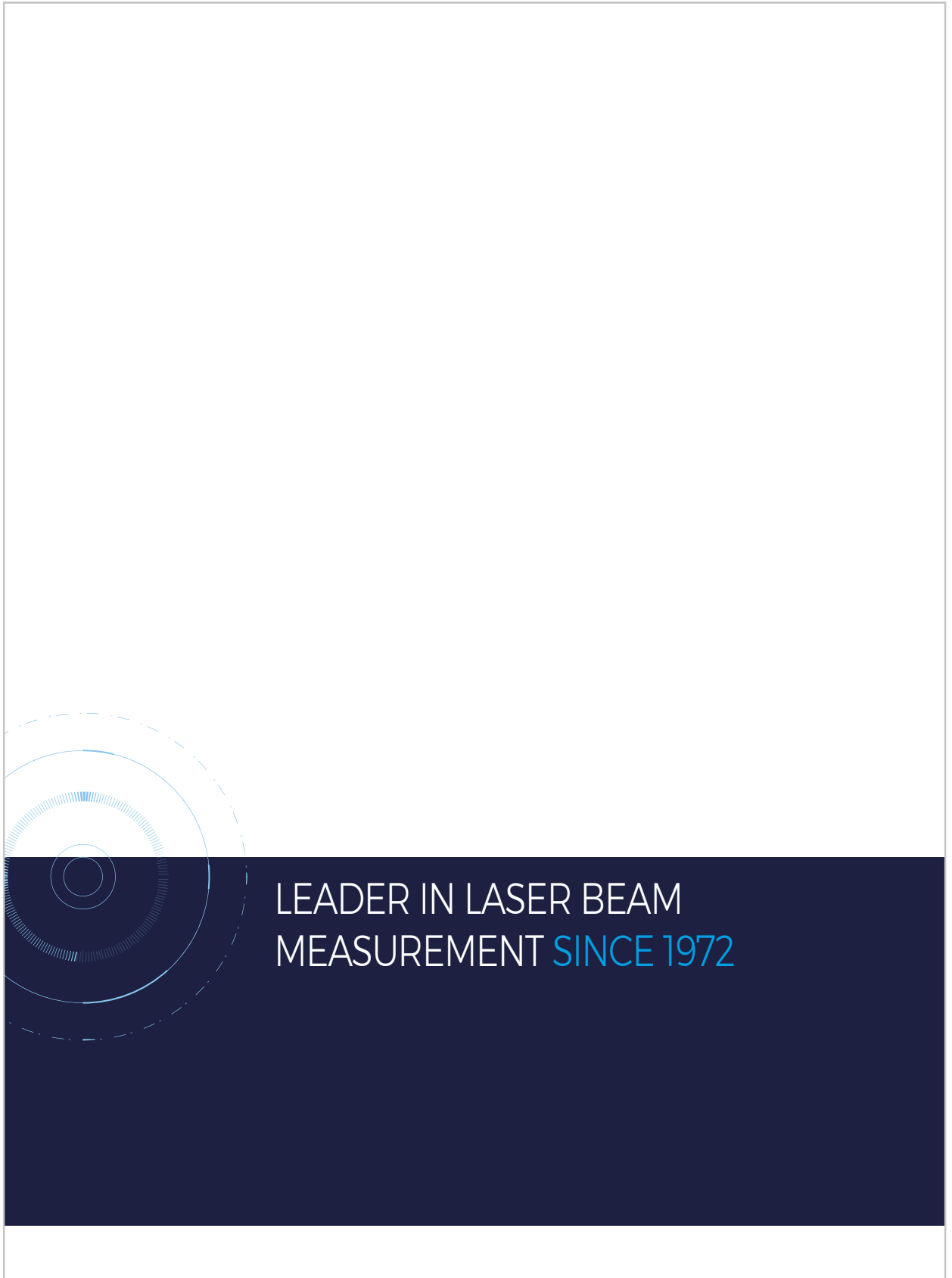
## DEVICE SETTINGS



-  **System:** Set device settings: language, date, time, sleep, number of digits, etc.
-  **Recording:** Set your default recording parameters for power/energy measurement and destination.
-  **Ethernet:** Set your Ethernet parameters or let MIRO manage this automatically.
-  **RS-232:** Set your RS-232 parameters.
-  **Analog output:** Set your analog output parameters.
-  **Trigger:** Use an external trigger and set your trigger level.
-  **About:** View important information about your device (serial number, firmware version, software version, calibration date) and find support.

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