READ THE LIGHT

GMP
GENERAL
MICROTECHNOLOGY
& PHOTONICS

LASER BEAM
MEASUREMENT

MIRO
by Gentec-EO

MIRO ALTITUDE

Touchscreen, single-channel, laser power & energy meter

New product

CONNECTIVITY

Detector
Analog out
Sync. out
External trigger
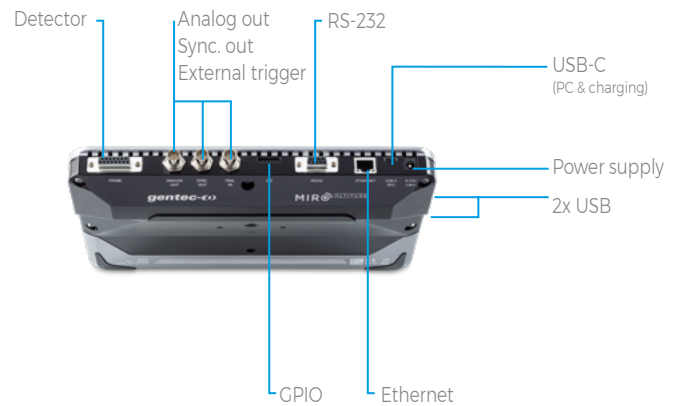RS-232
USB-C (PC & charging)
Power supply
2x USB
GPIO
Ethernet

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

POWER DETECTORS

ENERGY DETECTORS

BEAM PROFILING

TERAHERTZ DETECTORS

DISPLAYS & PC INTERFACES

CUSTOM / OEM PRODUCTS

New product

MIRO ALTITUDE	
DETECTOR TYPES	ALL MODELS: thermopiles, pyroelectrics, photodetectors
DISPLAY	10" high-resolution, anti-glare, touchscreen

POWER METER SPECIFICATIONS

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

ENERGY METER SPECIFICATIONS

Energy range	2 fJ to 30 kJ
Meter accuracy	1.0% ± 50 µV (< 500 Hz) 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

DETECTOR COMPATIBILITY

Thermopile	Average power & single shot energy
Photodetector	Average power & pulse energy
Pyroelectric	Average power & pulse energy

GENERAL SPECIFICATIONS

Digital display size	10.1-inch diagonal LCD - 1280 x 800 pixels
Outputs	Analog out, 0 - 2 V (BNC) Sync out (BNC) RS-232 (DB9) Ethernet (RJ45) USB-C 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)

PHYSICAL CHARACTERISTICS

Mounting holes	1/4"-20 and 2x10-32 threaded holes
Dimensions	268W x 196H x 36D mm
Weight	1.36 kg

ORDERING INFORMATION

Compatible stand	Ask
Product page	

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.

λ **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 **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

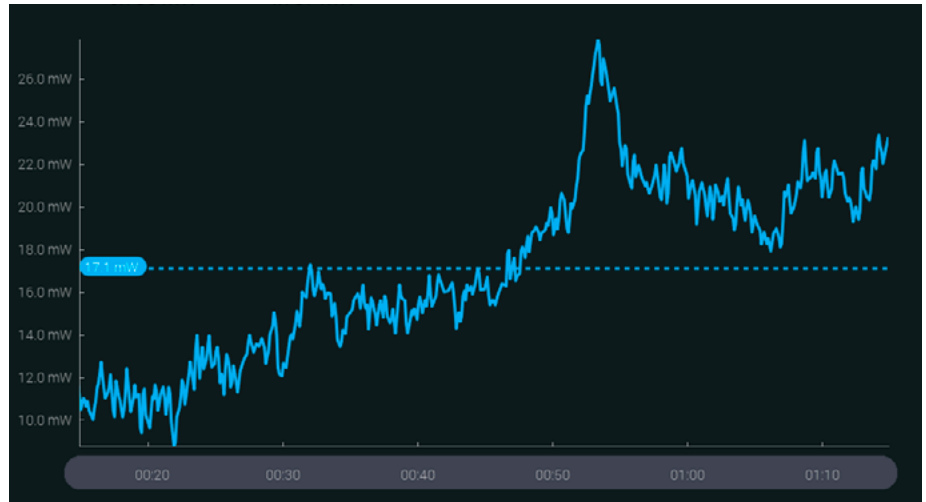**ZERO** **Zero:** Set the current measured value to zero

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.
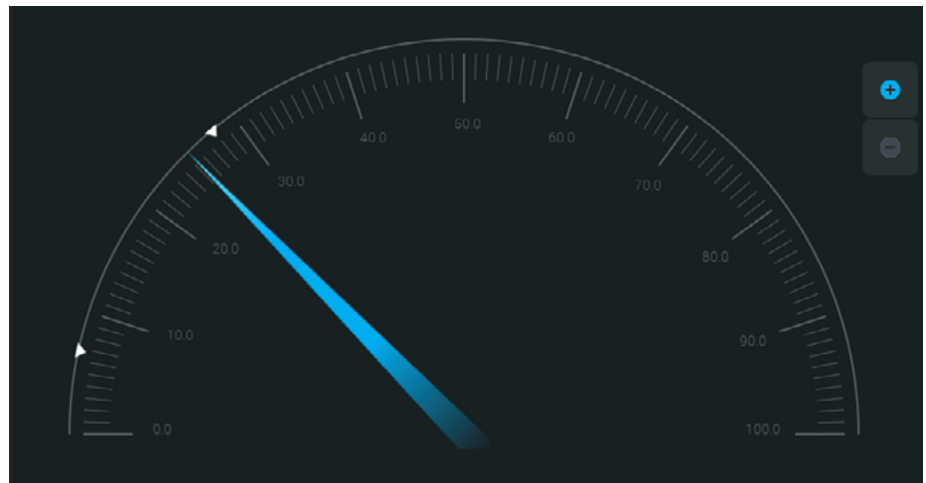
BAR DISPLAY

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.
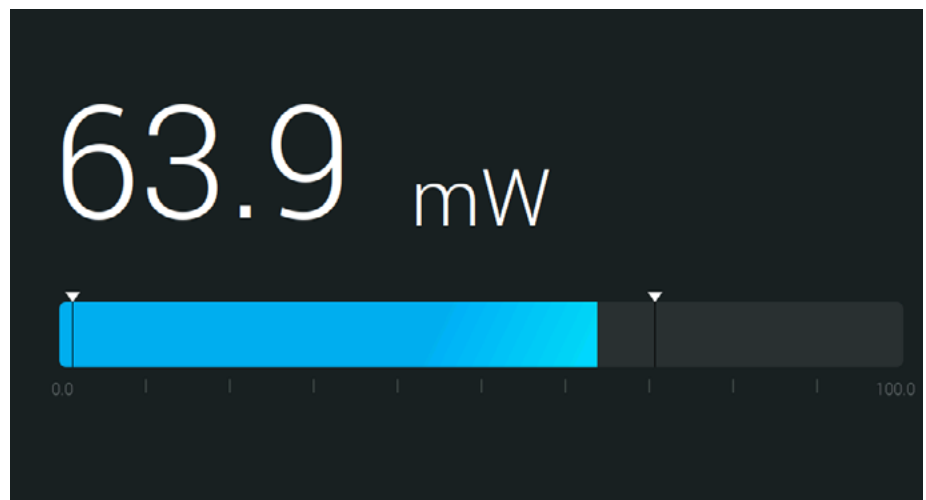
POWER DETECTORS

ENERGY DETECTORS

BEAM PROFILING

TERAHERTZ DETECTORS

DISPLAYS & PC INTERFACES

CUSTOM / OEM PRODUCTS

Specifications are subject to change without notice
T 418.651.8003 | info@gentec-eo.com

gentec-eo.com

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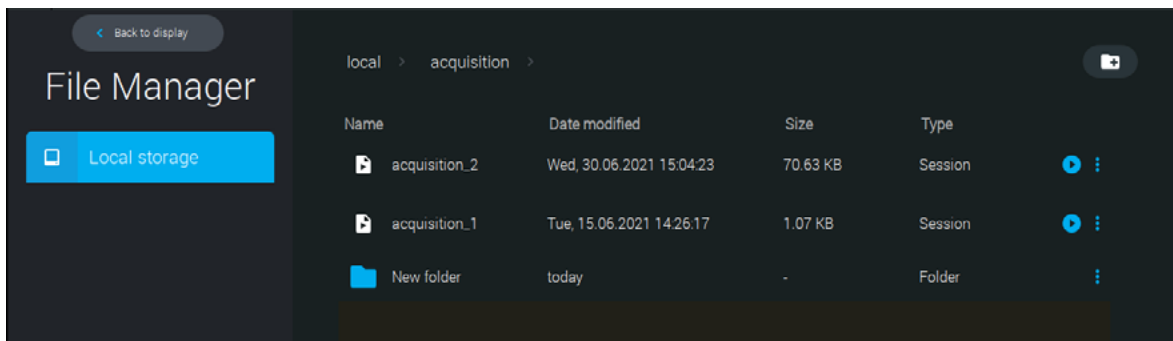
CONTROL CENTER
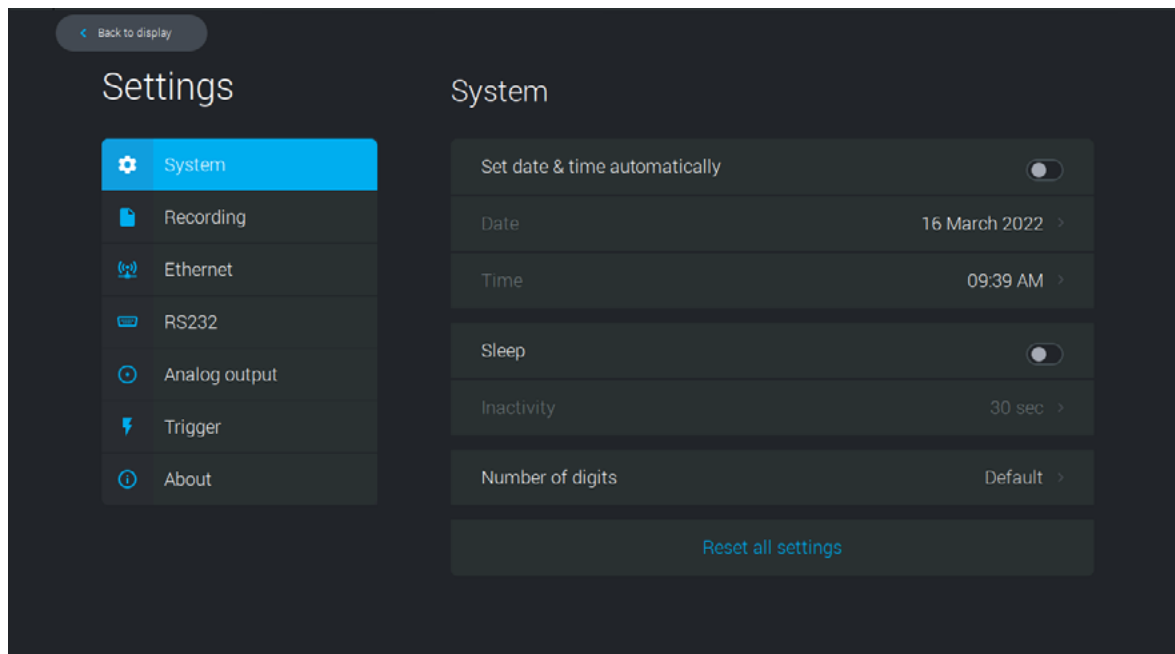
The control center is accessible from all screens in the top left corner.

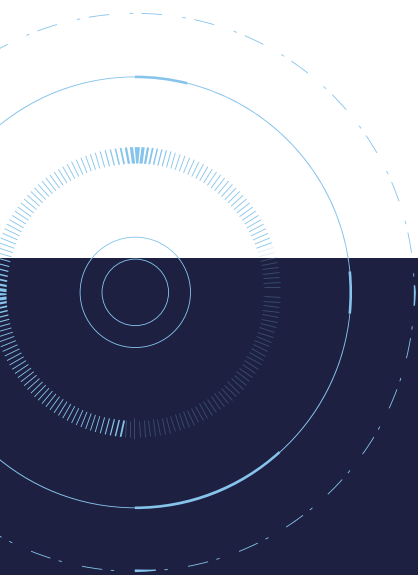Easily navigate between the main screens of the app:

 Display

 File manager

 Settings for the device.

Connect/disconnect your Gentec-EO detector to MIRO ALTITUDE

MIRO ALTITUDE
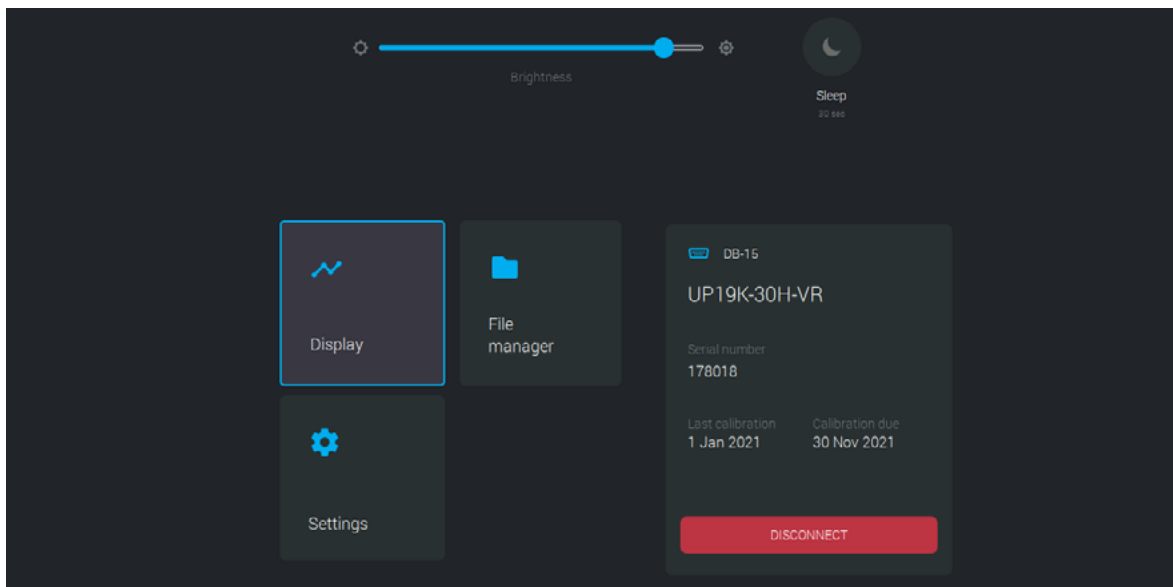
DEVICE SETTINGS

⚙ **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.

POWER DETECTORS

ENERGY DETECTORS

BEAM PROFILING

TERAHERTZ DETECTORS

DISPLAYS & PC INTERFACES

CUSTOM / OEM PRODUCTS

www.gmp.ch

| GMP SA | Main office: Avenue des Baumettes 17 | CH-1020 Renens | Tél. 021 633 21 21 | Fax. 021 633 21 29 | info@gmp.ch |
| GMP SA | Büro Zürich: Dübendorfstrasse 11a | CH-8117 Fällanden | Tel. 044 825 34 00 | Fax. 044 825 34 01 | info@gmp.ch |