DISPLAYS & PC INTERFACES

Overview of the display modules

We offer four models of meters with display: MIRO ALTITUDE and MAESTRO for both power and energy measurements, as well as TUNER and UNO for power readings. Connect one of these display devices to your detector and you have a complete laser power or energy measurement system

MIRO ALTITUDE

MIRO ALTITUDE is Gentec-EO's flagship product for reading laser power and energy. It was designed to help engineers and service technicians increase their productivity thanks to numerous innovative features in both hardware and software. Enter modern times of laser beam measurement with MIRO ALTITUDE.

Supercharge your productivity with an intuitive user interface, an extra large screen, tons of connectivity possibilities, 3 convenient display modes, a built-in dataviewer and a built-in file manager.

- PROFESSIONAL LASER POWER & ENERGY METER

MAESTRO

The MAESTRO power & energy meter is our top of the line display device with an extra-large 5.6 in color LCD display and fully touchscreen controls. With its unique user interface and faster electronics, it will do more, in less time, and with less effort than any other meter on the market!

- LASER POWER & ENERGY METER

TUNER

The TUNER power meter display presents both a large LCD display and an ultrafast needle. It also features min and max holds for both displays, comet tail needle and bar graph function. The TUNER comes in Gentec-EO's ergonomic design, with a large LCD display and easy to use direct access keys.

- ULTRA-FAST TUNING NEEDLE

UNO

The UNO is a simple power meter display, with large contrast fields and direct access buttons. Its extremely low power consumption allows it to work on standard alkaline batteries, making it the display of choice for service technicians working in the field. With the lowest price for a display meter, the UNO is the perfect choice when looking for a reliable, entry-level power meter.

- ECONOMICAL POWER METER

DISPLAYS & PC INTERFACES

Overview of the PC interfaces

The Gentec-EO PC interfaces come in various sizes and types to cover all applications. We offer models for power or energy measurement, or both. Most of our PC interfaces are single-channel, and we also offer models with either 2 channels or even up to 4 channels.

LINK SERIES

The U-LINK, P-LINK, S-LINK and M-LINK are PC interfaces for our power or energy detectors and are provided with free software applications.

- U-LINK is a universal power & energy meter that measures ALL detectors in our product range up to 10 kHz repetition rate. It has a very small footprint.
- P-LINK is a small power meter, available with either a USB or RS-232 connector. A 4 Channel version is also available.
- S-LINK comes with 1 or 2 channels and measures energy detectors at a very fast rate. It comes with a USB connector, Ethernet also available in option.
- M-LINK is a universal power & energy meter that measures ALL detectors in our product range and features a unique noise suppression method.

PC-BASED POWER OR ENERGY METERS

DISPLAY DEVICES




	MIRO ALTITUDE	MAESTRO	TUNER	UNO
Detector compatibility				
Power measurement	UP, XLP, PH, INTEGRA	UP, XLP, PH, HP, UM-B, THZ-D	UP, XLP, PH & HP	UP, XLP, PH & HP
Energy measurement	QE, also UP & XLP in SSE mode	QE, PE, also UP & XLP in SSE mode	N/A	N/A
Display	10in touchscreen	5.6in touchscreen	3.8in LCD, backlit	3.8in LCD
Output	2xUSB, USB-C, RS-232, Ethernet	USB, RS-232, Ethernet, analog output	Analog output	N/A
Data logging	Internal memory and USB key	USB key	N/A	N/A
External trigger	Yes	Yes	N/A	N/A
Number of channels	1	1	1	1

PC INTERFACES




	U-LINK	P-LINK	S-LINK	M-LINK
Detector compatibility				
Power measurement	UP, XLP, PH, UM-B, THZ-D	UP, XLP & PH	UP & XLP	UP, XLP, PH, THZ-D
Energy measurement	QE, PE, also UP & XLP in SSE mode	UP & XLP in SSE mode	QE, PE, also UP & XLP in SSE mode	QE, PE, also UP & XLP in SSE mode
Output	USB, analog output & sync. out. RS-232 available on certain models	USB & analog output. RS-232 available on certain models	USB & Ethernet	USB & analog output
External trigger	Yes	N/A	Yes	Yes
Maximum repetition rate	10 kHz/channel	N/A	10 kHz/channel	1 kHz
Number of channels	1	1 or 4, depending on model	1 or 2, depending on model	1

DISPLAYS & PC INTERFACES

Overview of the PC interfaces

PC INTERFACES

While the vast majority of Gentec-EO detector heads are compatible with the U-LINK and S-LINK PC interfaces, a few of our specialized detectors require different data processing methods. In this case, we offer dedicated PC interfaces that are optimized for these measurements.

- HIGH-PERFORMANCE ELECTRONICS FOR SPECIALIZED MEASUREMENTS

DEDICATED PC INTERFACES





	T-RAD	T-RAD-ANALOG	QUAD-4TRACK	MACH 6	APM (D)
Detector compatibility					
Power measurement	THZ-B series (-DZ models)	THZ-B series (-DA models)	QUAD-P series	N/A	UM-B series & THZ9D
Energy measurement	N/A	N/A	QUAD-E series	M6 series	M6 (with adaptor), QE-B & PE-B series
Output	USB & analog output	Analog output	USB & analog output	USB & analog output	Analog output
External trigger	Yes	Yes	Yes	Yes	N/A
Maximum repetition rate	N/A	N/A	1 kHz	200 kHz	Depends on the detector
Number of channels	1	1	4 (1 detector)	1	1

ALL-IN-ONE DETECTORS

Overview of the different models

We also offer displays and PC interfaces which are integrated with the detector head. We offer four families of these all-in-one detectors. INTEGRA features either a USB or RS-232 output for a direct connection to your PC. BLU is available for all our thermal power detectors and allows you to view and log power measurements on your mobile device or PC. PRONTO includes a display, so you have everything you need in a single, portable device.

INTEGRA

The INTEGRA version of our standard laser power or energy detectors allows you to read your measurements directly on your PC thanks to our free software.

Simply carry your all-in-one detector and plug it in your PC any time you need to measure your laser power or energy. No need to buy a separate meter!

- USB LASER POWER OR ENERGY METER
- **NEW!** MIRO ALTITUDE CAN READ AND DISPLAY INTEGRA

BLU

Our thermal power detectors (UP and HP series) are available in their BLU version, which allows you to read your power measurement directly on your mobile phone or PC thanks to Bluetooth connectivity.

You get the same high accuracy measurements without the need to connect any wires or to carry a separate acquisition & readout device. This solution is not only more practical, but also more economical compared to our other laser power measurement systems.

- WIRELESS LASER POWER METER

PRONTO

Our PRONTO series is of high interest for those who need a laser measurement system that is portable and compact. These products can be handheld (for low power only) or placed on a stand like our standard detectors.

These user-friendly products are so simple to use that anyone can start using them within seconds. They all offer data logging on their internal memory. Data can then be transferred to your PC via USB.

- PORTABLE, ALL-IN-ONE LASER POWER METERS

HP

Our HP series of high power detectors include internal signal processing and two data output options: USB to read and log measurements with your computer, or DB15 to use a Gentec-EO display such as MAESTRO.

If you prefer going wireless, the HP detectors are also available with the BLU option.

- ALL-IN-ONE SOLUTIONS FOR HIGH POWER MEASUREMENT

MIRO ALTITUDE

Touchscreen, single-channel, laser power & energy meter

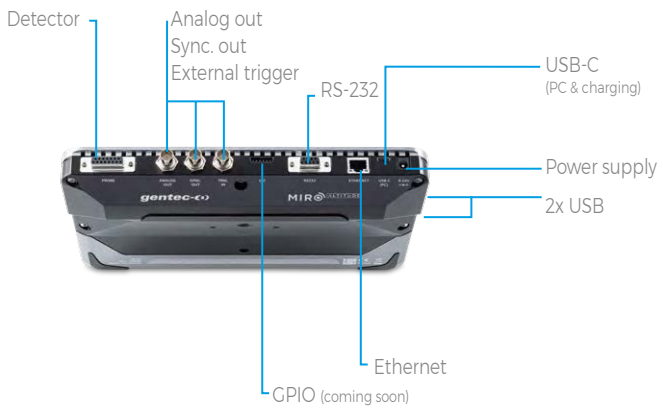
New product

MIRO ALTITUDE

KEY FEATURES

- **NEW! ALSO COMPATIBLE WITH INTEGRA**
  Combine INTEGRA and MIRO ALTITUDE for a portable solution to display and log your measurements
- **READS ALL HEADS**
  Power: thermopiles, photodetectors and pyroelectrics
  Energy: thermopiles (in SSE mode) 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)

CONNECTIVITY



NEW! COMPATIBLE WITH INTEGRA

ACCESSORIES

Additional 12V power supply

Power cord extension

Extra USB-C to USB-A

Pelican carrying case

STAND-R-443

Extra carrying sleeve

MIRO ALTITUDE

Specifications

CE NIST* Traceable WEEE/RoHS COMPLIANT

*Also traceable to NRC-CNRC

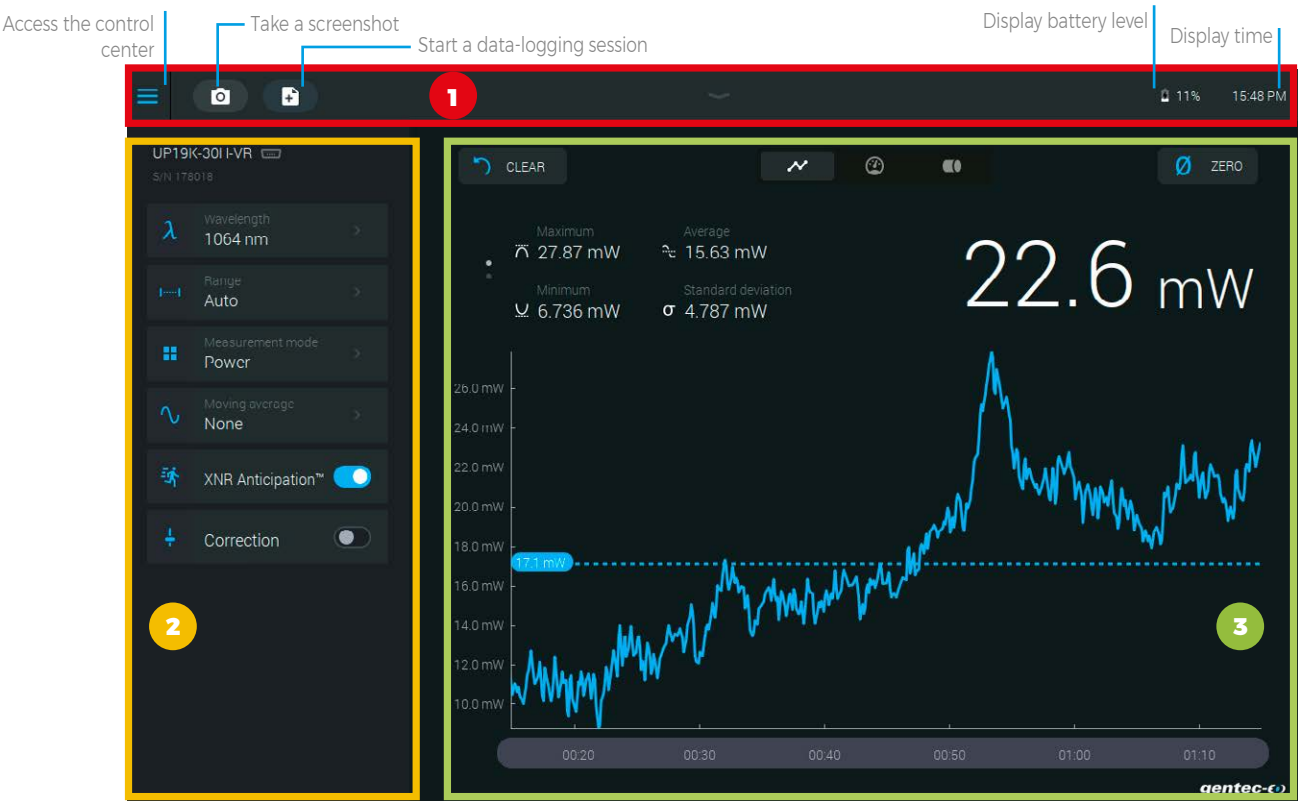
	MIRO ALTITUDE
DETECTOR TYPES	Thermopiles, pyroelectrics, photodetectors NEW! Also compatible with INTEGRA
DISPLAY	10" high-resolution, anti-glare, touchscreen
POWER METER SPECIFICATIONS	
Meter accuracy	±0.5% ± 3 µV from 20% to full scale
Statistics	Current value, max, min, average, standard deviation, RMS & PTP stability, time
ENERGY METER SPECIFICATIONS	
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 (UP, XLP & HP series)
Photodetector	Average power (PH series)
Pyroelectric	Average power & pulse energy (QE series, except QE8)
GENERAL SPECIFICATIONS	
Digital display size	10.1-inch diagonal LCD - 1280 x 800 pixels
Outputs	Analog out, 0 - 5 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, RS-232 or Ethernet
Data storage via	Internal memory or USB key
Battery type	Rechargeable Li-ion cell
Battery life	6 hours
External power supply	12 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	STAND-R-443
Product page	

Specifications are subject to change without notice

T 418.651.8003 | info@gentec-eo.com

MIRO ALTITUDE

Main screen



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, 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
- **Attenuator:** Toggle when using a Gentec-EO calibrated attenuator with your detector

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

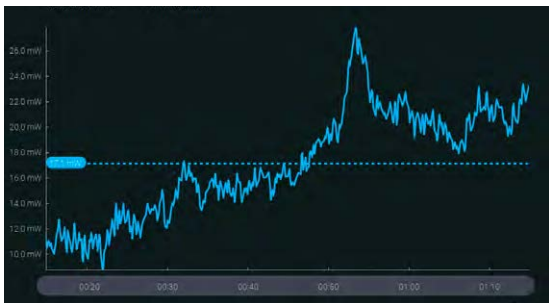
Zero: Set the current measured value to zero

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

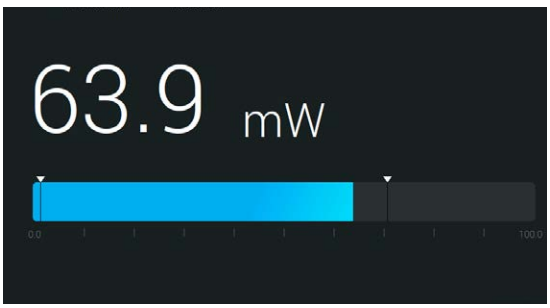
Faster than an analog needle thanks to XNR Anticipation™! This mode is particularly useful when tuning a laser. The real-time value and statistics are always visible at the top of the screen.

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.

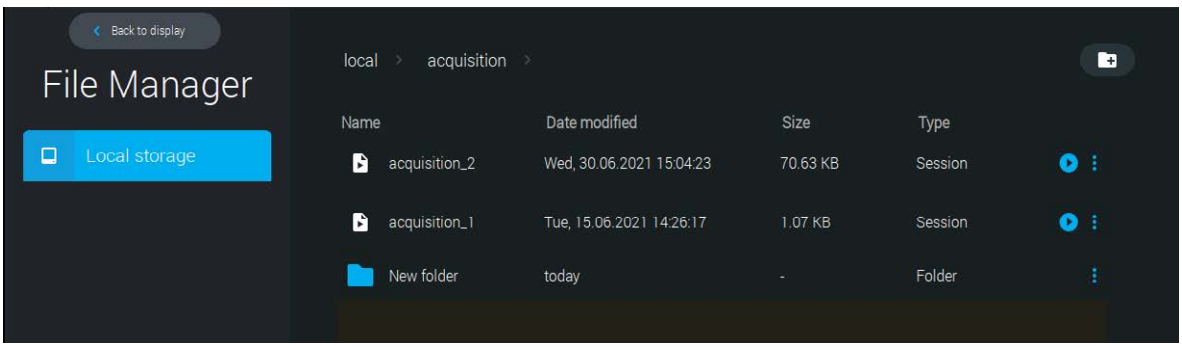


BUILT-IN FILE MANAGER AND DATA VIEWER

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.



MAESTRO

Touchscreen, single channel, power & energy monitor

MULTIPLE LANGUAGES

KEY FEATURES

READS ALL HEADS

- Power: thermopiles, photodetectors and pyroelectrics
- Energy: thermopiles (in single shot mode), photodetectors and pyroelectrics

LARGE TOUCHSCREEN COLOR LCD DISPLAY

- 5.6in diagonal
- FULLY touchscreen controls

UNIQUE ERGONOMIC DESIGN

Great for both handheld and tabletop use, with improved rubber bands and kickstand 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

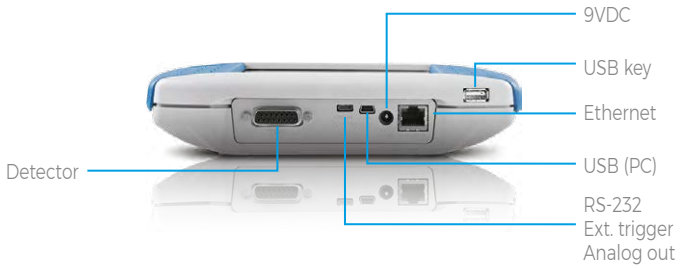
REAL-TIME STATISTICAL FUNCTIONS

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



DISPLAY AND LOG MEASUREMENTS

ACCESSORIES

Additional 9V power supply

Battery pack

USB, RS-232, external trigger & analog out cables

Pelican carrying case

MAESTRO
Specifications

*Also traceable to NRC-CNRC

	MAESTRO
DETECTOR TYPES	ALL MODELS: thermopiles, pyroelectrics, photodetectors
DISPLAY	Touchscreen 5.6 in color LCD
POWER METER SPECIFICATIONS	
Monitor accuracy	0.25% ± 5 µV best scale
Statistics	Current value, max, min, average, standard deviation, RMS & PTP stability, time
ENERGY METER SPECIFICATIONS	
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	Average power & single shot energy
Photodetector	Average power & pulse energy
Pyroelectric	Pulse energy & average power
GENERAL SPECIFICATIONS	
Interface languages	English, German, French and Japanese
Digital display size	112.9 x 84.7 mm LCD - 640 x 480 pixels
Data display	Real-time, scope, statistics, digital tuning needle and averaging
Analog output	0-1 Volt, full scale, ±0.5%
Rising edge external trigger	TTL compatible, 2-25 V at 0.4 mA
Serial commands via	USB (standard), Ethernet or RS-232 (cable in option)
Data storage via	USB key
Dimensions	210W x 122H x 45D mm
Weight (with batteries)	0.67 kg
Battery type	4 x 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 page	

UNO, TUNER

Single-channel power monitors

KEY FEATURES

- **ECONOMICAL**
  Get the best value for your money with these inexpensive and simple-to-use power monitors
- **READS ALL POWER DETECTORS**
  Thermopiles and photodetectors
- **LARGE LCD DISPLAY**
- **SINGLE-BUTTON NAVIGATION**
  Direct access and long press access to the main functions
- **LOW CONSUMPTION**
  Lasts 500 hours with 4 AA alkaline batteries

ACCESSORIES

Additional 9V power supply

Wall support

Pelican carrying case

UNO, TUNER
Specifications

*Also traceable to NRC-CNRC

	UNO	TUNER
DETECTOR TYPES	Thermopiles, photodetectors	Thermopiles, photodetectors
DISPLAY	LCD	LCD with tuning needle and backlight
POWER METER SPECIFICATIONS		
Monitor accuracy	± 1%	± 1%, full scale
Statistics	N/A	Min, max
Response time	1 s	< 1 s
DETECTOR COMPATIBILITY		
Thermopiles	Average power (UP, XLP & HP series)	Average power (UP, XLP & HP series)
Photodetectors	Average power (PH series)	Average power (PH series)
GENERAL SPECIFICATIONS		
Digital display size	76 x 57 mm LCD	77 x 58 mm LCD, backlit
Analog output	N/A	0-1 Volt, full scale, ± 1%
Dimensions (without stand)	210W x 122H x 44D mm	210W x 122H x 44D mm
Weight (with batteries)	0.47 kg	0.47 kg
Battery type	4 x AA alkaline	4 x AA alkaline
Battery life (estimated)	670 hours with detector	500 hours with detector
External power supply	optional: 100/240 VAC 50 - 60 Hz to 9 VDC 1.66 A	100/240 VAC 50 - 60 Hz to 9 VDC 1.66 A
ORDERING INFORMATION		
Product page		

U-LINK

Single channel, PC-based universal power and energy monitor

CONNECTIVITY

U-LINK (USB)

U-LINK (RS-232)

KEY FEATURES

THE UNIVERSAL PC-BASED METER

Reads ALL heads:

- Power: thermopiles, photodetectors and pyroelectrics
- Energy: thermopiles (in single shot mode), photodetectors and pyroelectrics

MEASURE fJ ENERGY LEVELS

Thanks to a unique digital method for suppressing the noise on the lower ranges

EXTERNAL TRIGGER

Synchronize your U-LINK to your pulsed laser or digital chopper (available on U-LINK (USB) model only)

SYNCHRONIZE MULTIPLE CHANNELS

With the "SYNC. OUT" port, you can plug multiple U-LINK devices together and create a low-cost multi-channel system (available on U-LINK (USB) model only)

SERIAL COMMANDS

Serial commands are available on both versions to let you take full control

REAL-TIME STATISTICAL FUNCTIONS

Max, min, average, standard deviation, RMS and PTP stability.

ACCESSORIES

USB, RS-232, external trigger & analog out cables

Pelican carrying case

Additional 9V power supply (RS-232 version only)

U-LINK
Specifications

*Also traceable to NRC-CNRC

	U-LINK (USB)	U-LINK (RS-232)
DETECTOR TYPES	ALL MODELS: thermopiles, pyroelectrics, photodetectors	ALL MODELS: thermopiles, pyroelectrics, photodetectors
DISPLAY	1-Channel / PC-based	1-Channel / PC-based
POWER METER SPECIFICATIONS		
Resolution (digital)	23 bits on current scale	23 bits on current scale
Monitor accuracy	±0.5% ± 3 µV	±0.5% ± 3 µV
Statistics	Current value, max, min, average, std dev., RMS & PTP stability, time	Current value, max, min, average, std dev., RMS & PTP stability, time
ENERGY METER SPECIFICATIONS		
Resolution (digital)	Current scale/3754	Current scale/3754
Monitor accuracy	1% ± 50 µV (< 500 Hz) / 2% ± 50 µV (500 Hz - 10 kHz)	1% ± 50 µV (< 500 Hz) / 2% ± 50 µV (500 Hz - 10 kHz)
Software trigger level	0.1 to 99.9%, 0.1% resolution, default 2%	0.1 to 99.9%, 0.1% resolution, default 2%
Repetition rate [a]	10 kHz	10 kHz
Real-time data transfer	10 kHz with time stamp, no missing point	10 kHz with time stamp, no missing point
Statistics	Current value, max, min, average, std dev., RMS & PTP stability, pulse #, repetition rate, average power	Current value, max, min, average, std dev., RMS & PTP stability, pulse #, repetition rate, average power
DETECTOR COMPATIBILITY		
Thermopile	Average power & single shot energy	Average power & single shot energy
Pyroelectric	Pulse energy & average power	Pulse energy & average power
Photodetectors	Average power & pulse energy	Average power & pulse energy
GENERAL SPECIFICATIONS		
Digital display	Computer screen	Computer screen
Data display	With PC-Gentec-EO: real-time, scope, averaging, statistics and digital tuning needle	With PC-Gentec-EO: real-time, scope, averaging, statistics and digital tuning needle
Serial commands and data transfer via	USB	RS-232
Real-time data transfer rate [a]	Up to 10 kHz with time stamp, no missing point (for pyroelectrics only)	Up to 10 kHz with time stamp, no missing point (for pyroelectrics only)
Analog output	0 - 2 V, full scale, ± 1%, user-defined	0 - 2 V, full scale, ± 1%, user-defined
External trigger	3.3 to 12 V	3.3 to 12 V
Dimensions	57W x 26H x 91D mm	57W x 26H x 91D mm
Weight	0.12 kg	0.12 kg
ORDERING INFORMATION		
Product page		

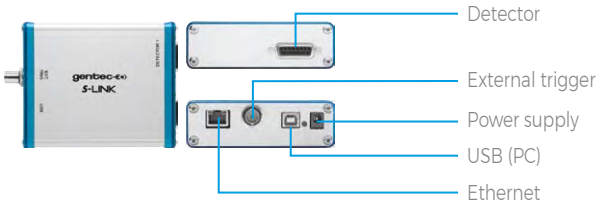
a. Maximum repetition rate and data transfer rate may vary with PC and detector speeds.

S-LINK

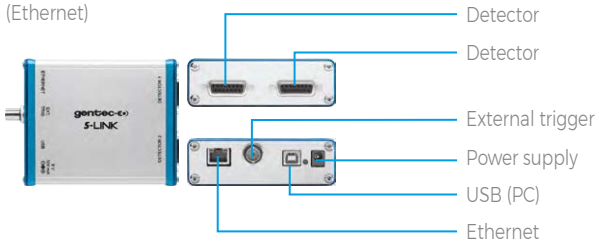
Dual & single channel, PC-based power and energy monitor

CONNECTIVITY

S-LINK-1
(Ethernet)



S-LINK-2
(Ethernet)



KEY FEATURES

- **READS BOTH POWER AND ENERGY**
  Thermopiles and pyroelectrics
- **AVAILABLE WITH 1 OR 2 CHANNELS**
  S-LINK-1 and S-LINK-2 models now available
- **PC-BASED**
  Connects to your PC with included software
- **SERIAL COMMANDS**
  Serial commands are available on all versions to let you take full control
- **FASTEST DATA TRANSFER RATE**
  Get all the points transferred directly into your PC at 10 kHz/channel
- **USB OR ETHERNET**
  Choose your favourite communications port.
- **EXTERNAL TRIGGER**
  Every model comes standard with a 2.4 V to 24 V external trigger

ACCESSORIES

Additional 9V power supply

USB cable

Pelican carrying case

S-LINK
Specifications

*Also traceable to NRC-CNRC

	S-LINK-1	S-LINK-2
DETECTOR TYPES	Thermopiles, pyroelectrics	Thermopiles, pyroelectrics
CHANNELS / DISPLAY	1-Channel / PC-based	2-Channels / PC-based
POWER METER SPECIFICATIONS		
Monitor accuracy	±0.75% for 10% to full scale	±0.75% for 10% to full scale
Statistics	Current value, max, min, average, std dev., RMS & PTP stability, time	Current value, max, min, average, std dev., RMS & PTP stability, time
Response time	1 s	1 s
ENERGY METER SPECIFICATIONS		
Resolution (digital)	Normal mode: Current scale/4096	Normal mode: Current scale/4096
Monitor accuracy		
< 500 Hz (MB), < 1200 Hz (MT)	1%	1%
500 to 1200 Hz (MB)	2%	2%
1200 to 6000 Hz (MT)	3%	3%
6000 to 10 000 Hz (MT)	6%	6%
Real rime data transfer[a]	10 kHz in normal mode, no missing point	10 kHz/Channel in normal mode, no missing point
Statistics	Current value, max, min, average, std dev., RMS & PTP stability, pulse #, repetition rate, average power	
DETECTOR COMPATIBILITY		
Thermopile	Average power & single shot energy	Average power & single shot energy
Pyroelectric	Pulse energy	Pulse energy
GENERAL SPECIFICATIONS		
Number of channels	1	2
Digital display	Computer screen	Computer screen
Data display	Real-time, ratio, line plot, histogram, statistics and 3D histogram	Real-time, ratio, line plot, histogram, statistics and 3D histogram
Serial commands and data transfer via	USB or Ethernet	USB or Ethernet
Real-time data transfer rate	10 kHz/channel in normal mode, no missing point (for pyroelectrics only) [a]	10 kHz/channel in normal mode, no missing point (for pyroelectrics only) [a]
Rising edge external trigger	3-24 V at 13 mA, optically isolated	3-24 V at 13 mA, optically isolated
Dimensions	106W x 34H x 147D mm	106W x 34H x 147D mm
Weight	0.424 kg	0.424 kg
Ext. power supply	100/240 VAC 50 - 60 Hz to 9 VDC 1.66 A	100/240 VAC 50 - 60 Hz to 9 VDC 1.66 A
ORDERING INFORMATION		
Product page		

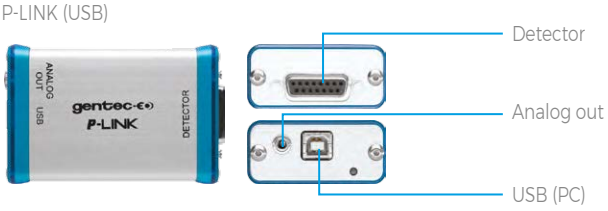
a. Actual rate may depend on the computer.

P-LINK

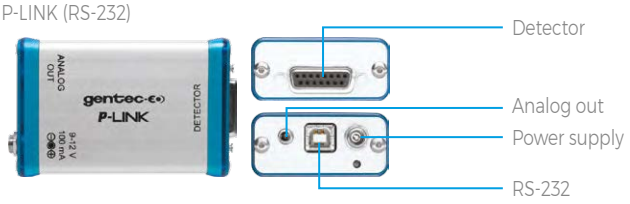
1 and 4 channels, PC-based power monitors

CONNECTIVITY

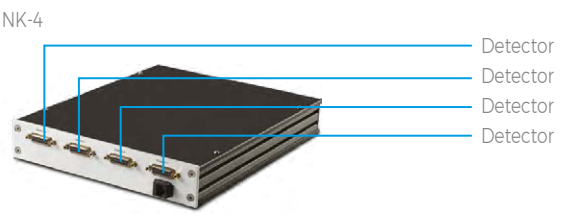
P-LINK (USB)



P-LINK (RS-232)



P-LINK-4



KEY FEATURES

- **READS ALL POWER DETECTORS TYPES**
  Thermopiles and photodetectors of the PH Series
- **PC-BASED**
  Connects to your PC with included software
- **MULTI-CHANNEL CAPABILITIES**
  Available with 1 or 4 channels
- **SERIAL COMMANDS**
  Serial commands are available on both versions to let you take full control
- **REAL-TIME STATISTICAL FUNCTIONS**
  Max, min, average, standard deviation, RMS and PTP stability. Also high low alarm and post-analysis mode (P-LINK-4 only)
- **USB OR RS-232**
  Choose your favourite communications port. The USB version is port-powered.

ACCESSORIES

Additional 9V power supply (RS-232 version only)

USB & RS-232 cables

Pelican carrying case

P-LINK
Specifications

CE NIST* Traceable WEEE/RoHS COMPLIANT

*Also traceable to NRC-CNRC



	P-LINK (USB)	P-LINK (RS-232)	P-LINK-4 (USB)
DETECTOR TYPES	Thermopiles, photodetectors	Thermopiles, photodetectors	Thermopiles, photodetectors
CHANNELS / DISPLAY	1-Channel / PC-based	1-Channel / PC-based	4-Channels / PC-based
POWER METER SPECIFICATIONS			
Monitor accuracy	±0.5% full scale	±0.5% full scale	±0.5% full scale
Statistics	[a] Current value, max, min, average, std dev., RMS & PTP stability, time	[a] Current value, max, min, average, std dev., RMS & PTP stability, time	[b] Current value, max, min, average, std dev., RMS & PTP stability, time
Response time	1 s	1 s	1 s
DETECTOR COMPATIBILITY			
Thermopile	Average power & single shot energy	Average power & single shot energy	Average power
Photodetector	Average power (mW, dBm)	Average power (mW, dBm)	Average power (mW)
GENERAL SPECIFICATIONS			
Number of channels	1	1	4
Digital display	Computer screen	Computer screen	Computer screen
Data display	[a] Real-time, histogram, statistics, Digital tuning needle	[a] Real-time, histogram, statistics, Digital tuning needle	[b] Real-time, graphic, statistics, high/low alarm, Post-analysis mode, multi-channel
Analog output	0 - 2 Volt, adjustable, full scale, ± 1%	0 - 2 Volt, adjustable, full scale, ± 1%	N/A
Serial commands and data transfer via	USB	USB	USB
Real-time data transfer rate	10 Hz	10 Hz	10 Hz
Dimensions	57W x 26H x 91D mm	57W x 26H x 91D mm	286W x 233H x 43D mm
Weight	0.12 kg	0.12 kg	2.5 kg
External power supply	100/240 VAC 50 - 60 Hz to 12 VDC 200 mA	100/240 VAC 50 - 60 Hz to 12 VDC 200 mA	100/240 VAC 50 - 60 Hz to 5 VDC, 3 A
ORDERING INFORMATION			
Product page			

a. Using PC-Gentec-EO software.
b. Using Octolink software.

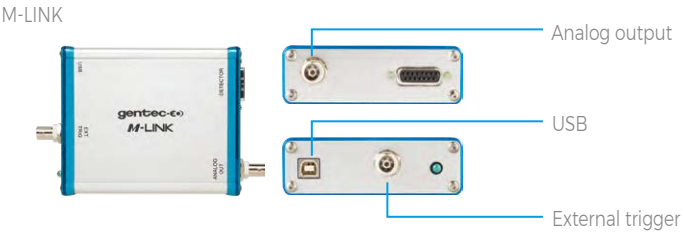
Specifications are subject to change without notice

T 418.651.8003 | info@gentec-eo.com

M-LINK

Single channel, PC-based universal power and energy monitor

CONNECTIVITY



KEY FEATURES

THE UNIVERSAL PC-BASED METER

Reads ALL heads:

- Power: thermopiles, photodetectors and pyroelectrics
- Energy: thermopiles (in single shot mode), photodetectors and pyroelectrics

MEASURE fJ ENERGY LEVELS

Thanks to a unique digital method for suppressing the noise on the lower ranges

EXTERNAL TRIGGER

Synchronize your M-LINK to your pulsed laser or digital chopper

DIGITAL (USB) OUTPUT

Connect the M-LINK module directly to your PC

POWERFUL LABVIEW SOFTWARE

Features include:

- Complete instrument controls: range, trigger, wavelength, etc.
- Live display in J and J/cm2 or W and W/cm2
- Full Statistics: min, max, mean, standard deviation, RMS stability, repetition rate, etc.
- Graphic displays: strip chart, histogram, tuning needle and more
- Data file collection and analysis

ACCESSORIES

USB cable

Pelican carrying case

M-LINK
Specifications

*Also traceable to NRC-CNRC

	M-LINK
DETECTOR TYPES	ALL MODELS: thermopiles, pyroelectrics, photodetectors
DISPLAY	PC-based
POWER METER SPECIFICATIONS	
Resolution (digital)	Current scale/3000
Monitor accuracy	±0.5% ± 2 digits
Statistics	Current value, max, min, average, std dev., RMS & PTP stability, time
ENERGY METER SPECIFICATIONS	
Resolution (digital)	Current scale/3000
Monitor accuracy	1% ± 2 digits (< 1 kHz)
Software trigger level	0.1 to 99.9%, 0.1% resolution, default 2%
Repetition rate [a]	1000 Hz
Real-time data transfer	1000 Hz with time stamp, no missing point
Statistics	Current value, max, min, average, std dev., RMS & PTP stability, pulse #, repetition rate, average power
DETECTOR COMPATIBILITY	
Thermopile	Average power & single shot energy
Pyroelectric	Pulse energy & average power
Photodetectors	Average power & pulse energy
GENERAL SPECIFICATIONS	
Digital display	Computer screen
Data display	Real-time, scope, averaging, statistics and digital tuning needle
Serial commands and data transfer via	USB
Real-time data transfer rate	1000 Hz with time stamp, no missing point (for pyroelectrics only)
Analog output	0 - 2 V, full scale, ± 2% (joulemeters) ± 4% (wattmeters)
Rising or falling edge external trigger	4.5 to 10 V @ 20 mA, optically isolated
Dimensions	106W x 34H x 147D mm
Weight	0.424 kg
ORDERING INFORMATION	
Product page	

a. Maximum repetition rate may vary with PC and detector speeds.

INTEGRA
Embedded PC interface

KEY FEATURES

- **ALL-IN-ONE DETECTOR + METER**
  Plug your detectors directly into your PC with the INTEGRA embedded PC interface
- **INCREDIBLE PERFORMANCE**
  INTEGRA detectors offer the same performance as the usual detector + PC interface combination
- **USB OR RS-232**
  INTEGRA detectors are offered with a choice of USB or RS-232 connector
- **COMPACT SIZE**
  Perfect for the lab, OEM applications and field servicing. No need to carry a meter!
- **LOWER RECALIBRATION COSTS**
  One product = one calibration. Reduce your recalibration costs by half!
- **UNIVERSAL SOFTWARE-PC-GENTEC-EO**
  Control your INTEGRA detector with the same powerful software as the MAESTRO
- **CUSTOMIZABLE**
  Contact us for custom cable lengths and serial commands
- **NEW! COMPATIBLE WITH MIRO ALTITUDE**
  Combine INTEGRA and MIRO ALTITUDE for a portable solution to display and log your measurements

CONNECTIVITY

- Three models available:
  - USB output (-INT)
  - RS-232 output (-IDR)
  - USB with external trigger (-INE)

USB model name -INT

RS-232 model name -IDR

External trigger model name -INE

ACCESSORIES

USB-A to USB-C adaptor

RS-232 to USB-A convertor

MIRO ALTITUDE

EASY TO MOUNT

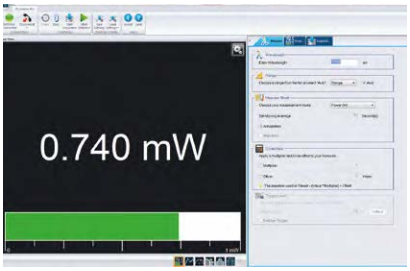
Secure it on your optical table

WATCH OUT FOR THIS LOGO!

Available with integra

PC-GENTEC-EO

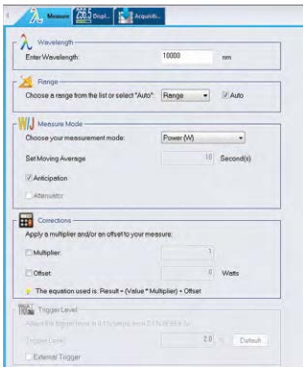
Universal software for INTEGRA, MAESTRO, P-LINK, U-LINK AND HP



MAIN CONTROLS

Complete and easily navigable software interface with all the necessary options and tools:

Connection:	Connect or Disconnect your device.
Controls:	Turn the Turbo Mode ON or OFF, make a Zero to remove the thermal offset, start the Acquisition of the data and start the calculations of the Statistics associated with this data.
Startup Config:	Save your measurements settings or Load the settings associated with an already existing file.
Help:	Get information about the PC-Gentec-EO software and read the user manual.
Measure:	Configure the parameters related to your measurements.
Display:	Set the desired number of digits and settings associated with the selected display.
Acquisition:	Enter the parameters related to the acquisition of data.



MEASUREMENT PARAMETERS

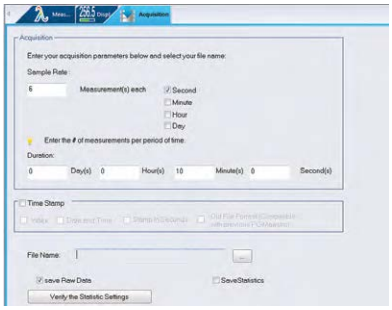
The Measure tab allows you to configure the parameters related to your measurements:

Wavelength:	Enter the Wavelength of your laser and the software will apply the appropriate correction factor on the measurements.
Range:	Set the power or energy Range to a fixed scale or let the software automatically adjust the scale.
Measure Mode:	Select the type of Measurement that will be displayed (power, energy) and let the software know if you want Anticipation and if there is any Attenuation.
Corrections:	Apply a Multiplication Factor and/or an Offset to your measurements.
Trigger Level:	Set the Trigger Level in 0.1 % steps, from 0.1 % to 99.9 % (in energy mode only).

MULTIPLE DISPLAYS

Select the display that suits you best and watch your measurements in real time! With the options toolbar in the bottom of the interface, you can manage the displays at your convenience:

Real-time:	Real-time value and corresponding bar graph
Scope:	Line filling graph
Needle:	Fast analog-like needle
Averaging:	Shows trend of laser over time
Histogram:	Displays up to 100 bars
Statistics:	Min, Max, Average, RMS and PTP Stability, Rep. Rate and Standard Deviation



DATA ACQUISITION

The Acquisition tab allows you to enter the parameters for data acquisition:

Power Mode:	Choose a Sampling Rate (number of measurements per interval of time), a Total Duration (in days, hours, minutes and seconds) for the data acquisition, a Time Stamp for each value and the File Name and File Location. You can choose to save only the raw data and/or the statistics associated with your data acquisition.
Energy Mode:	Choose a sampling rate (1 pulse out of X pulses), a total duration (total number of pulses) for the acquisition of data, a timestamp for each value, the file name and file location. Decide if you want to save raw data and/or the statistics associated with this data.

BLU

Wireless Bluetooth® PC interface

MEASURE WITH YOUR SMARTPHONE, TABLET OR PC

Display the results on your mobile device with the Gentec-EO BLU app available FREE on Google Play and Apple Store. Need to use it with a PC? Simply plug in the included Bluetooth receptor and use PC-Gentec-EO.

KEY FEATURES

- **ALL-IN-ONE DETECTOR + METER**
  This new line of All-in-One detectors combine a detector and a meter with Bluetooth connectivity in one convenient product. No need to carry a meter!
- **SAVE 50 % ON CALIBRATION COSTS**
  One product = one calibration. Reduce your recalibration costs by half!
- **EXTENSIVE COVERAGE**
  Receive data at up to 30m from the detector, with the same performance as the usual detector + PC interface combination.
- **EASY TO SET UP**
  Perfect for field service, labs and OEM applications.
- **GO WIRELESS**
  No need to worry about cable length or PC interface location.
- **LONG BATTERY LIFE**
  The USB-rechargeable Li-ion battery lasts up to 5 continuous days with the device running

WATCH OUT FOR THIS LOGO!

Available with blu

BLU

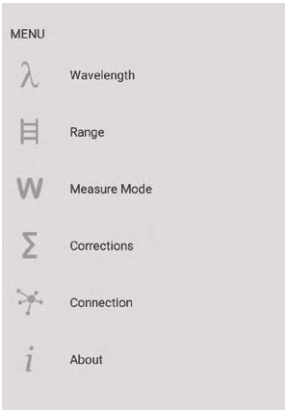
Free software for smartphones and tablets

MAIN CONTROLS

Connecting a BLU device is very simple in the mobile application. Just open the app and it will automatically search for all available devices. Then, tap on the desired device in the list.

If there are no devices within range, the app will propose a simulator.

When a BLU detector is connected to a phone or computer, no other device can communicate with it.



MEASUREMENT PARAMETERS

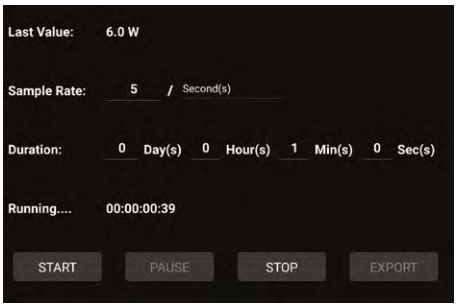
The menu tab, available with the ☰ icon or by swiping from the left of the screen, allows you to configure the parameters related to your measurements:

Wavelength:	Enter the wavelength of your laser and the software will apply the appropriate correction factor on the measurements.
Range:	Set the power or energy range to a fixed scale or let the software automatically adjust the scale.
Measure Mode:	Select the type of measurement that will be displayed: power, in watts (default) or single shot energy, in joules (energy/calorimeter mode).
Corrections:	Apply a multiplication factor and/or an offset to your measurements.
Trigger Level:	Set the trigger level in 0.1 % steps, from 0.1 % to 99.9 % (in energy mode only).
Connection:	Use this option to see the list of BLU devices within range.

MULTIPLE DISPLAYS

Select the display that suits you best and watch your measurements in real time! Simply swipe the screen to switch between the various displays:

Scope:	Line filling graph; grab screenshots to save & share easily with your device
Needle:	Fast analog-like needle
Real-time:	Real-time value and corresponding bar graph
Statistics:	Min, max, average, RMS and PTP stability and standard deviation



DATA ACQUISITION

The acquisition screen allows you to enter the parameters for data acquisition:

Power mode:	Choose a sample rate (number of measurements per interval of time) and a duration (in days, hours, minutes and seconds) for the data acquisition.
Energy mode:	Choose a sampling rate (1 pulse out of X pulses) and a duration (total number of pulses) for the acquisition of data.

Once the acquisition is complete, you can export the data to any of the data-sharing apps installed on your mobile device, or send it by email