PRONTO-250

0.5 W - 250 W power probes with touchscreen controls

KEY FEATURES

POCKET-SIZE
This mid to high power laser probe is so compact it fits in your pocket!

EASY TO USE
The color LCD touchscreen allows for a friendly user interface. You can make a measurement with just the touch of a button!

DATA LOGGING
Save your data to the internal memory and then transfer them to your PC over the USB connection.

FROM LOW TO HIGH POWERS
Thanks to a low noise level and high damage threshold, the PRONTO can measure powers from 0.5 W to 250 W.

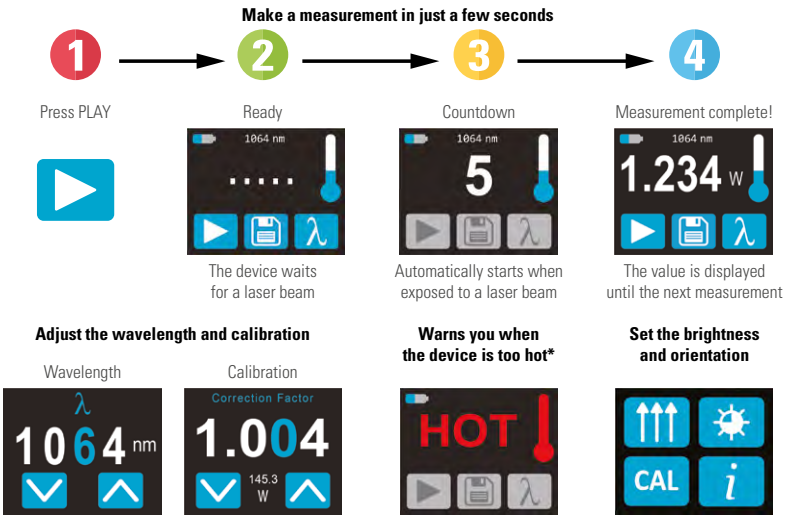
THE FLEXIBILITY TO PICK THE CALIBRATIONS YOU NEED
The PRONTO-250-FLEX offers three calibration options so you only pay for what you need:

- Default calibration "Y": for visible to NIR wavelengths (248 nm to 2.5 µm)
- Additional calibration "C": for CO_2 lasers (10.6 µm)
- Additional calibration "E": for energy measurements with ± 5 % accuracy

HANDS-FREE OPERATION
Place it on a flat surface or use one of the 2 threaded holes for safe use with optical stands.

SERIAL COMMANDS
Serial commands are available to let you take full control of your PRONTO from your PC.

USER INTERFACES (SSP MODE)



** Device may get hot, it is not recommended for handheld use when making a measurement*

3 MODELS FOR ALL YOUR MEASUREMENT NEEDS

PRONTO-250-EZ
Adapted to dirty environments, the PRONTO-250-EZ offers the same performance as PRONTO-250-FLEX, with the added advantage that it can be cleaned on-the-go.

- Perfect for field use

PRONTO-250-FLEX
PRONTO-250-FLEX comes with 3 measurement modes and can be used in a variety of applications:

- Single shot power (SSP): up to 250 W
- Continuous power (CWP): up to 8 W
- Single shot energy (SSE): up to 25 J

PRONTO-50-W5
This model has our proprietary absorber with extremely high damage thresholds to handle tightly focused beams without damaging the absorber.

- Single shot power (SSP): up to 50 W

CONNECTIVITY

HANDS-FREE

DATA TRANSFER TO PC

PRONTO-250
Specifications

*Also traceable to NRC-CNRC

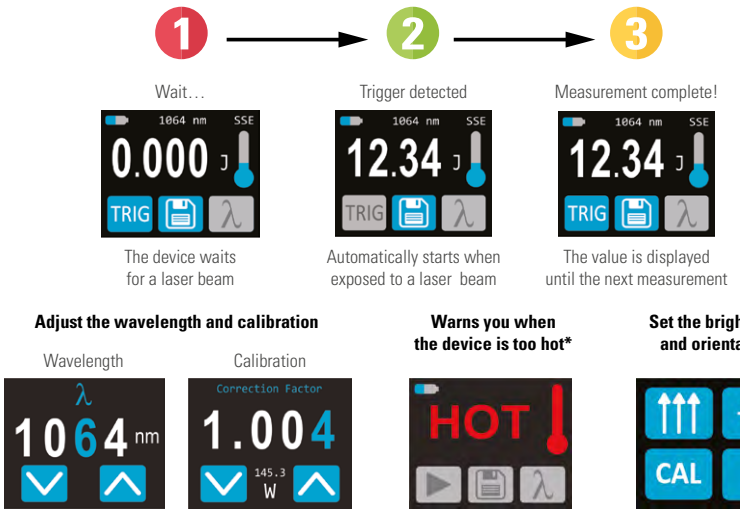
	PRONTO-250-FLEX & PRONTO-250-EZ			PRONTO-50-W5
	SSP Mode Measures in 5 s	CWP Mode Measures power continuously	SSE Mode Measures single-shot energy	
MAX AVERAGE POWER/ENERGY	250 W	8 W	25 J (up to 150 J for pulses >1 ms)	50 W
EFFECTIVE APERTURE	19 mm Ø			19 mm Ø
INTERFACE	Touchscreen color LCD display			Touchscreen color LCD display
MEASUREMENT CAPABILITY				
Spectral range	0.19 - 20 µm			0.19 - 10 µm
Calibrated spectral range	0.248 - 2.5 µm (default) 10.6 µm available with calibration option "C"			0.248 - 2.5 µm
Noise equivalent power/energy	10 mW	10 mW	60 mJ	4 mW
Minimum measurable power/energy	0.5 W	0.2 W	N/A	0.5 W
Exposure time	5 s	1.5 s response time	0.26 s	5 s
Measurement accuracy	± 3%	± 2.5%	± 5 % with additional calibration "E" Typical value as default	± 3%
Min repetition period (Max pulse width)	N/A	N/A	4 s (88 ms)	N/A
Display resolution	1 mW	1 mW	10 mJ	1 mW
DAMAGE THRESHOLDS				
Maximum average power density [a]	45 kW/cm² (at 1064 nm, 10 W, CW) 14 kW/cm² (at 10.6 µm, 10 W, CW)			100 kW/cm² (at 1064 nm, 10 W, CW)
Maximum exposure time [b]	6 s	N/A	N/A	6 s
Maximum device temperature [b]	65°C	40°C	40°C	65°C
USER INTERFACE				
Measurement controls	Wavelength selection and user calibration			Wavelength selection and user calibration
Measurement modes	Single Shot Power (SSP), Continuous Power (CWP) and Single Shot Energy (SSE)			Single Shot Power (SSP)
Data acquisition and transfer	Yes			Yes
GENERAL SPECIFICATIONS				
Display type	Touchscreen color LCD			Touchscreen color LCD
Display size	28.0 x 35.0 mm (128 x 160 pixels)			28.0 x 35.0 mm (128 x 160 pixels)
Data storage	50 000 pts			50 000 pts
Battery type	Rechargeable Li-ion			Rechargeable Li-ion
Battery life	17 hours or 4 200 measurements (with brightness set at 25%)			17 hours or 4 200 measurements (with brightness set at 25%)
Battery recharge via	USB port			USB port
PHYSICAL CHARACTERISTICS				
Effective aperture	19 mm Ø			19 mm Ø
Absorber	H9 (FLEX) or EZ (easy to clean)			W5
Mounting holes (for post)	2 x 8-32			2 x 8-32
Dimensions	59W x 181.4L x 17D			59W x 181.4L x 17D
Weight	210 g			210 g
ORDERING INFORMATION				
Compatible stand	STAND-S-233			STAND-S-233
Product page				

a. To get all the damage thresholds, see User Manual.
b. At maximum power.

PRONTO-500-IPL

Portable laser probe for IPL sources, 2 - 350 J per pulse

USER INTERFACE (SSE MODE)



* Device may get hot, it is not recommended for handheld use when making a measurement

KEY FEATURES

HIGH ENERGY PER PULSE
Accurate readings up to 350 J/pulse!

EASY TO USE
The touchscreen color LCD allows for a friendly user interface. You can make a measurement with just the touch of a button!

DATA LOGGING
Save your data to the internal memory and then transfer them to your PC over the USB connection.

LARGE APERTURE
55 mm Ø aperture to accommodate large beams

RUGGED
- All-metal body
- High damage thresholds

PROTECTIVE WINDOW
- For measurements with gel-coupled IPL heads.
- Protects the absorber, easy to clean

SERIAL COMMANDS
Serial commands are available to let you take full control of your PRONTO from your PC.

ACCESSORIES

Stand with steel post

Pelican carrying case

PRONTO-500-IPL

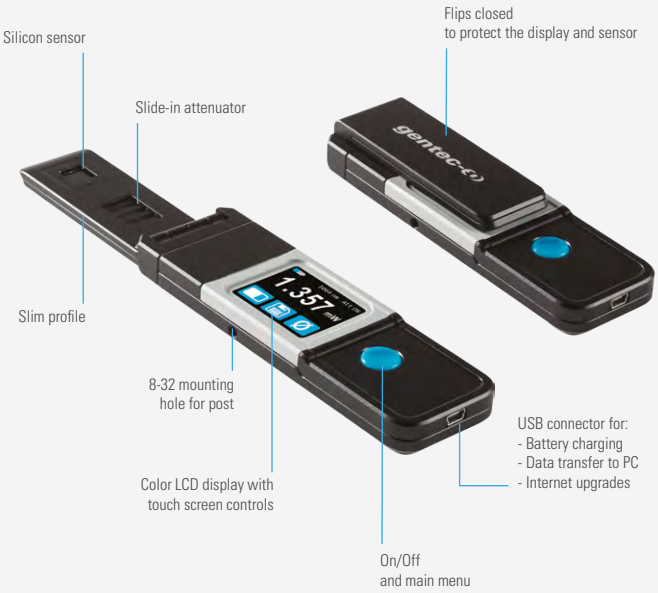
Specifications

*Also traceable to NRC-CNRC

	PRONTO-500-IPL
MAX PULSE ENERGY (SINGLE SHOT)	350 J
EFFECTIVE APERTURE	55 mm Ø
APERTURE TYPE	Full aperture with protective window
MEASUREMENT CAPABILITY	
Spectral range	0.19 - 2.5 µm
Calibrated spectral range	1064 nm
Energy range	2 - 350 J
Noise equivalent energy	500 mJ
Minimum repetition period	15 s (= time between measurements)
Maximum pulse width	433 ms
Accuracy	± 5%
DAMAGE THRESHOLDS	
Maximum average power density	45 kW/cm² (1064 nm, 10 W, CW)
Pulsed laser damage threshold	175 J/cm² (10 ms pulses)
Maximum allowable absorber temperature	65 °C
GENERAL SPECIFICATIONS	
Display type	Touchscreen color LCD
Display size	28.0 x 35.0 mm (128 x 160 pixels)
Data storage	50 000 pts
Battery type	Rechargeable Li-ion
Battery life	17 hours or 4 200 measurements (with brightness set at 25%)
Battery recharge via	USB port
PHYSICAL CHARACTERISTICS	
Effective aperture	55 mm Ø
Dimensions (sensor head)	88W x 88L x 32D mm (194L with handle)
Dimensions (monitor)	41W x 136L x 16D mm
Weight	930 g
ORDERING INFORMATION	
Compatible stand	STAND-S-443
Product page	

PRONTO-SI

0.3 nW - 800 mW power probe with touchscreen controls



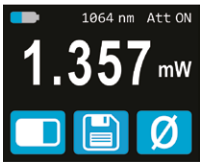
KEY FEATURES

- **POCKET-SIZE**
  This low power laser probe is so compact it fits in your pocket!
- **SLIM PROFILE**
  The sensor part is only 6 mm thick, allowing it to fit into tight spaces
- **EASY TO USE**
  The color LCD touchscreen allows for a friendly user interface. You can make a measurement with just the touch of a button!
- **VERY LOW POWER MEASUREMENTS**
  Thanks to its very low noise level of only 10 pW, the PRONTO-Si measures powers as low as 0.3 nW
- **SLIDE-IN ATTENUATOR**
  Just slide the OD1 integrated filter to the ON position and you can measure up to 800 mW of continuous power at 532 nm (maximum power varies with wavelength)
- **DATA LOGGING**
  Save your data to the internal memory and then transfer them to your PC over the USB connection
- **OPTIONAL FIBER OPTICS ADAPTOR**
  The fiber optics adaptor is held securely in place with a set screw and is compatible with OD attenuators
- **SERIAL COMMANDS**
  Serial commands are available to let you take full control of your PRONTO from your PC.

USER INTERFACE

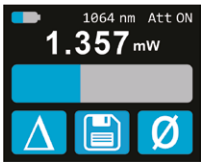
3 Displays for the measurements

Real-time display



Displays the measured value with large digits so you can see them from a distance

Bargraph display

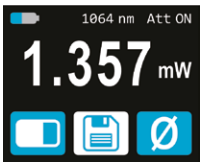


Adds a bargraph below the measured value, for an intuitive understanding of the trend of your laser

Min/Max display

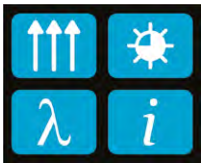
In addition to the real time value, the device displays the lowest and highest values

Save your data and transfer it to your PC



Adjust the wavelength

Set the brightness and orientation



DATA TRANSFER TO PC

ACCESSORIES

Threaded adaptor for PRONTO-Si

Fiber adaptors

PRONTO-SI
Specifications

CE NIST* Traceable WEEE/RoHS COMPLIANT

*Also traceable to NRC-CNRC

	PRONTO-SI
MAX AVERAGE POWER* (ATTENUATOR OFF / ATTENUATOR ON)	88 mW / 800 mW
EFFECTIVE APERTURE	10 x 10 mm
INTERFACE	Touchscreen color LCD display
MEASUREMENT CAPABILITY	
Calibrated spectral range	
Attenuator OFF	320 - 1100 nm
Attenuator ON	400 - 1100 nm
Power range*	
Attenuator OFF	0.3 nW - 88 mW at 532 nm
Attenuator ON	3 nW - 800 mW at 532 nm
Noise equivalent power	10 pW at 980 nm
Response time	0.2 s
Measurement accuracy	From ± 1.5% to ± 7.5% (wavelength-dependent)
Display resolution	1 pW
DAMAGE THRESHOLDS	
Maximum average power density	100 W/cm²
Maximum average power	800 mW (with attenuator ON)
USER INTERFACE	
Displays	Real-time, bar graph and min/max
Measurement controls	Zero offset, wavelength selection and reset data
Data acquisition and transfer	Yes
GENERAL SPECIFICATIONS	
Display type	Touchscreen Color LCD
Display size	28.0 x 35.0 mm (128 x 160 pixels)
Data storage	50 000 pts
Battery type	Rechargeable Li-ion
Battery life	17 hours (with brightness set at 25%)
Battery recharge via	USB port
PHYSICAL CHARACTERISTICS	
Effective aperture	10 x 10 mm
Sensor	Silicon
Attenuator	Integrated slide-in OD1 attenuator
Mounting hole (for post)	1 x 8-32
Dimensions (Open)	41W x 216.2L x 15.8D mm (Sensor part is only 6.0D mm)
Dimensions (Closed)	41W x 136L x 22.1D mm
Weight	150 g
ORDERING INFORMATION	
Compatible stand	STAND-S-233
Product page	

** See curves (page 61) for maximum power at other wavelengths*