

Economical Handheld Laser Power Meter, 843-R Series



843-R is a low cost Laser Power Meter yet capable of measuring from pJ and pW to thousands of Watts, in an ergonomically designed compact body. It is compatible Newport's 818, 918D, 819C/D series photodiode sensors or the new 919P series thermopile sensors. A single shot energy pulse measurement can be done. 843-R has two display modes: a large digital display with a bar graph or with a high resolution simulated analog needle.

Note that the 843-R Optical Power Meter is not compatible with the 818P series Thermopile Sensors and the 818E series Pyroelectric Sensors.

We recently introduced 843-R-USB, which has the same performance as the 843-R with the addition of USB communication to the PC. Install PMManager™ application software to use with the 843-R-USB and turn your PC into a full optical power meter workstation. We also provide a COM object for system integrators as well as a LabVIEW library.

- New! USB communication enabled Model 843-R-USB
- Compact handheld design with rubber bumpers and a kickstand
- Clear TFT 320 X 240 display
- Digital value display with either bar graph or a simulated analog needle
- Analog output
- Single shot energy measurement with a thermopile sensor
- Compatible with Newport photodiode detectors and new 919P series thermopile sensors
- Backlighting and rechargeable battery



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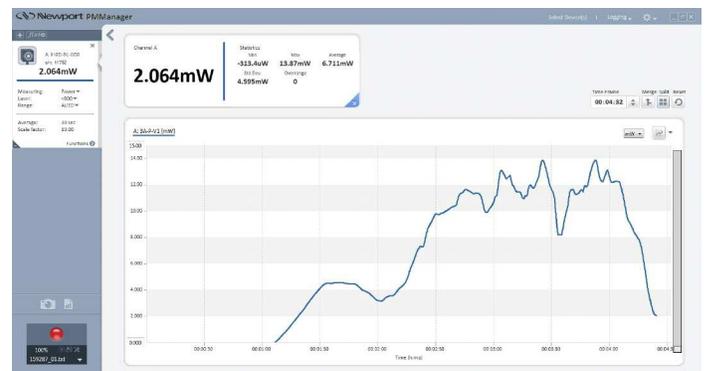
PMManager™ Application Software

PMManager is a powerful application software controlling and taking measurement data out of the new Model 843-R-USB Laser Power Meter. It turns a PC into a laser power multi-channel analysis workstation. The PMManager software features include:

- Extensive graphic display of data:
 - Line Plot, Histogram, Pulse Chart, and Simulated Analog Needle
 - Multiple data sets on separate graphs on the same screen
- Advanced measurement processing
 - Power/energy density, scale factor, normalize against a reference
 - Multi-channel comparisons
 - User defined mathematical equations: channels A/B, etc.
- Connect additional devices during active measurements
- Data logging for future review
 - Displayed graphically or saved in text format
 - Exported to an Excel spreadsheet.
- Printing of graphs and data.
- Interfaces and supports data logging with Newport's devices



PMManagerApplication Window, with Histogram plot of only one channel



PMManagerApplication Window, with Line graph of only one channel

Compatible Optical Detectors

918D Series Low-Power Calibrated Photodiode Sensors



Low-Power Calibrated Photodiode Sensors *



Wand Style Calibrated Photodiode Sensors *



Fiber Optic Detectors



Calibrated Integrating Sphere Sensors



919P Series Thermopile Sensors



* Note: /CM models requires 843-DIN adapter. The legacy 841-DIN adapter is not compatible with 843-R.



The connector of the 818-xx/DB models come with a DB15 connector (left), while the 818-xx/CM models come with a round 8-pin connector.

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843-R Specifications

843-R Handheld Power Meter Specifications

Accuracy	±0.25 % (Full Scale) ± 20 p A
Resolution	18 bits plus sign
Sampling Rate (Hz)	15
Maximum Detector Input Current (mA)	1.4
Display Type	High legibility TFT 320 x 240 pixel graphics LCD
Input Range	15 nA - 1.5 mA full scale in 16 ranges
Display	15 mm numeric display. High resolution analog needle also can be chosen.
Analog Output	0-1 V into 100 Ω, mono audio 2.5 mm jack (included)
Communication Interfaces	None for 843-R, USB2.0 for 843-R-USB
Display Refresh Rate	15 Hz
Battery Life	14 hours typical between charges.
Power Requirements	DC 12 - 16 V, 1W
Weight [lb (kg)]	1.0 (0.47)
Dimensions (W x H x D) [in. (mm)]	4.4 (113) x 8.4 x 1.6 (40)
CE Certified	Yes
RoHS	Compliant

1) Instrument range is determined by detector used, please refer to our complete offering on detector types for complete specifications of individual detectors.

Ordering Information

Model	Description
843-R	Economical Handheld Laser Power Meter, 843-R
843-R-USB	Economical Handheld Laser Power Meter, 843-R-USB
843-PS-US	Spare External Power Supply for 843-R, US Style Plug
843-PS-EU	Spare External Power Supply for 843-R, EU Style Plug
843-DIN	8-pin DIN to DB15 Adapter, 818-xx/CM Detectors to DB15 Power Meters



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Newport Corporation, Irvine and Santa Clara, California and Franklin, Massachusetts; Evry and Beaune-La-Rolande, France; Stahnsdorf, Germany and Wuxi, China have all been certified compliant with ISO 9001 by the British Standards Institution.

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