

Power Measurement Kits

PMKIT Series



BEST VALUED BUNDLES

These kits are useful for those who are new to optical measurements and need simple measurement tools. All kits include a BPH-3 post holder with a slotted base and a 3 inch long, 1/2 inch diameter post.

STANDARD PMKIT

The standard power meter kits include one of the advanced handheld meters (1919-R or 843-R series), or one of the virtual meters (844-PE-USB or 845-PE-RS), and one of the photodiodes or thermopile based thermal detectors that are listed on page 2.

Please contact Newport sales for additional ordering options and information*.

PMKIT Series Advantages

- Best value for industry proven products
- Versatile configurations
- Kit includes a power meter, a detector, and mounting assembly
- Simple ordering process and great flexibility



Available Configurations

PMKIT-xx-yy (xx = sensor value), (yy = meter value)

Detector Choice	Model	Description
01	818-SL-L-FC/DB	Fiber Optic Detector, Si, 400-1100 nm, 5 mW, DB15
02	818-UV-L-FC/DB	Fiber Optic Detector, UV-Si, 200-1100 nm, 0.2 mW, DB15
03	818-IR-L-FC/DB	Fiber Optic Detector, Ge, 780-1800 nm, DB15, 10 mW
04	818-IG-L-FC/DB	Fiber Optic Detector, InGaAs, 800-1650 nm, 10 mW, DB15
05	818-UV/DB	Photodetector, UV Enhanced Silicon, 200-1100 nm, DB15 Calibration Module
06	818-SL/DB	818 Photodetector, Silicon, 400-1100 nm, DB15 Calibration Module
07	818-IR/DB	818 Photodetector, Germanium, 780-1800 nm, DB15 Calibration Module
08	818-IG/DB	818 Photodetector, InGaAs, 800-1650 nm, DB15 Calibration Module
11	918D-UV-OD3R	UV Enhanced Silicon Photodetector, 200-1100 nm, OD3 Attenuator, DB15
12	918D-SL-OD3R	Silicon Detector, 400-1100 nm, OD3 Attenuator, DB15
13	918D-IR-OD3R	Germanium Photodetector, 780-1800 nm, OD3 Attenuator, DB15
14	918D-IG-OD3R	InGaAs Photodetector, 800-1650 nm, OD3 Attenuator, DB15
15	818-ST2/DB	818 Photodetector, Silicon, 400-1100 nm, OD3 Attenuator, DB15, Wand-style
21	919P-003-10	Thermopile Sensor, 3 W, 10 mm, 0.19-10.6 μ m
22	919P-010-16	Thermopile Sensor, 10 W, 16 mm, 0.19-10.6 μ m
23	919P-020-12	Thermopile Sensor, 20 W, 12 mm, 0.19-10.6 μ m
24	919P-030-18	Thermopile Sensor, 30 W, 18 mm, 0.19-10.6 μ m
25	919P-040-50	Thermopile Sensor, 35 W CW, 50 mm, 0.19-10.6 μ m
26	919P-050-18HP	High Peak Power Thermopile Sensor, 50 W, 17.5 mm, 0.24-2.2 μ m
27	919P-050-26	Thermopile Sensor, 50 W, 26 mm, 0.19-10.6 μ m
28	919P-150-26	Thermopile Sensor, 150 W, 26 mm, 0.19-10.6 μ m
29	919P-250-35	Thermopile Sensor, 250 W, 35 mm, 0.19-10.6 μ m
30	919P-600-65	Thermopile Sensor, 600 W, 65 mm, 0.19-10.6 μ m
32	918D-ST-UV	UV Enhanced Silicon photodiode, 200-1100 nm, OD3 Attenuator, DB15, Wand-Style thin-profile
Power Meter Choice	Model	Description
01	843-R	Economical Handheld Laser Power Meter, 843-R
03	843-R-USB	Economical Handheld Laser Power Meter, 843-R-USB
04	1919-R	High Performance Handheld Optical Power Meter
05	844-PE-USB	Virtual Power Meter, USB
06	845-PE-RS	Virtual Power Meter, RS232

Specifications

Model	PMKIT-05-01	PMKIT-06-01	PM- KIT-15-01	PMKIT-07-01	PMKIT-21-01	PMKIT-22-01	PMKIT-24-01	PMKIT-05-03
Power Meter	843-R							843-R-USB
Resolution (% of Full Scale)	18 bits plus sign							
Accuracy (A)	±0.25 % ± 20 p							
Sampling Rate (Hz)	15							
Display Type	High legibility TFT 320 x 240 pixel graphics LCD							
Detector	818-UV/DB	818-SL/DB	818-ST2/DB	818-IR/DB	919P-003-10	919P-010-16	919P-030-18	819-UV/DB
Wavelength Range (nm)	190 to 1100	400 to 1100	400 to 1100	780 to 1800	0.190 to 10.6 (μm)			190-1100
Maximum Power Density (W/cm2)	30				1 kW/cm²	28 kW/cm²	20 kW/cm²	30
Calibration Uncertainty	3.4% @ 190-300 nm, 1.65% @ 300-430 nm, 1.1% @ 430-1000 nm	1.65% @ 400-430 nm, 1.1% @ 430-1000 nm, 4.3% @ 1035-1065 nm		2.4% @ 780-1430 nm, 2.6% @ 1430-1600 nm	±1.9%			3.4% @ 190-300 nm
								1.65% @ 300-430 nm
								1.1% @ 430-1000 nm
Maximum Measurable Power	1.5 W	2 W		1.3 W	3 W	10 W	30 W	1.5 W
Maximum Measurable Power without Attenuator	5 mW (200-400 nm); 2.5 mW (400 - 600 nm, >1050 nm) , 1.5 mW (600 - 1050 nm)	2.5 mW		1.3 mW				5 mW (200-400 nm); 2.5 mW (400-600 nm, >1050 nm), 1.5 mW (600-1050 nm)
Minimum Detectable Power	20 pW		1 nW	5 nW	40 μm	20 mW	20 mW	20 pW

Note: Please refer to the individual product pages to review complete specifications.

Model	PMKIT-05-04	PMKIT-06-04	PMKIT-12-04	PMKIT-21-04	PMKIT-06-03	PMKIT-06-05	PMKIT-32-01
Power Meter	1919-R				843-R-USB	844-PE-USB	843-R
Resolution (% of Full Scale)	18 bits plus sign						
Accuracy (A)	$\pm 0.25\% \pm 20\text{ p}$						
Sampling Rate (Hz)	15						
Display Type	High legibility TFT 320 x 240-pixel graphics LCD					NA	LCD (same)
Detector	818-UV/DB	818-SL/DB	918D-SL-OD3R	919P-003-10	818-SL/DB	818-SL/DB	918D-ST-UV
Wavelength Range	190 to 1100 nm	400 to 1100 nm	400 to 1100 nm	0.19 to 11 μm	400 to 1100 nm	400 to 1100 nm	200 to 1100 nm
Maximum Power Density	30 W/cm ²			1 kW/cm ²	30 W/cm ²		30 W/cm ²
Calibration Uncertainty	3.4% @ 190 to 300 nm, 1.65% @ 300 to 430 nm, 1.1% @ 430 to 1000 nm, 4.3% @ 1035 to 1065 nm	1.65% @ 400 to 430 nm, 1.1% @ 430 to 1000 nm, 4.3% @ 1035 to 1065 nm	1.65% @ 400 to 430 nm, 1.1% @ 430 to 1000 nm, 4.3% @ 1035 to 1065 nm	$\pm 1.9\%$	1.65% @ 400 to 430 nm, 1.1% @ 430 to 1000 nm, 4.3% @ 1035 to 1065 nm	1.65% @ 400 to 430 nm, 1.1% @ 430 to 1000 nm, 4.3% @ 1035 to 1065 nm	3.4% @ 220 to 300 nm, 1.65% @ 300 to 430 nm, 1.1% @ 430 to 1000 nm, 4.3% @ 1035 to 1065 nm
Maximum Measurable Power	1.5 W	2 W	2 W	3 W	2 W	2 W	200 mW
Maximum Measurable Power without Attenuator	5 mW (200 - 400 nm) 2.5 mW (400 - 600 nm, >1050 nm) 1.5 mW (600 - 1050 nm)	2.5 mW	2.5 mW	NA	2.5 mW	2.5 mW	0.3 mW (200 - 400 nm) 0.1 mW (400 - 600 nm, >1050 nm) 0.07 mW (600 - 1050 nm)
Minimum Detectable Power	20 pW	20 pW	20 pW	40 μW	20 pW	20 pW	20 pW

Note: Please refer to the individual product pages to review complete specifications.

Ordering Information

Model	Description
PMKIT-05-01	Power meter Kit (843-R, 818-UV/DB & Mounting Assy), 200-1100 nm, 1.5W
PMKIT-06-01	Power Meter Kit (843-R, 818-SL/DB & Mounting Assy), 400-1100 nm, 2W
PMKIT-15-01	Power Meter Kit (843-R, 818-ST2/DB & Mounting Assy), 400-1100 nm, 2W
PMKIT-07-01	Power Meter Kit (843-R, 818-IR/DB & Mounting Assy), 780-1800 nm, 1.3W
PMKIT-21-01	Power Meter Kit (843-R, 919P-003-10 & Mounting Assy), 0.19-10.6 μm , 3W
PMKIT-22-01	Power Meter Kit (843-R, 919P-010-16 & Mounting Assy), 0.19-10.6 μm , 10W
PMKIT-24-01	Power Meter Kit (843-R, 919P-030-18 & Mounting Assy), 0.19-10.6 μm , 30W
PMKIT-05-03	Power Meter Kit (843-R -USB, 818-UV/DB & Mounting Assy), 200-1100 nm, 1.5W
PMKIT-05-04	Power Meter Kit (1919-R, 818-UV/DB & Mounting Assy), 200-1100 nm, 1.5W
PMKIT-06-04	Power Meter Kit (1919-R, 818-SL/DB & Mounting Assy), 400-1100 nm, 2W
PMKIT-12-04	Power Meter Kit (1919-R, 918D-SL-OD3R & Mounting Assy), 400-1100 nm, 2W
PMKIT-21-04	Power Meter Kit (1919-R, 919P-003-10 & Mounting Assy), 0.19-10.6 μm , 3W
PMKIT-06-03	Power Meter Kit (843-R-USB, 818-SL/DB & Mounting Assy), 400-1100 nm, 2W
PMKIT-06-05	Power Meter Kit (844-PE-USB, 818-SL/DB & Mounting Assy), 400-1100 nm, 2W
PMKIT-32-01	Power Meter Kit (843-R, 918D-ST-UV & Mounting Assy), 200-1100 nm, 200 mW

* New ordering options will have minimum order quantity.