

Power Measurement Kits

PMKIT Series

mks | Newport

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, 780-1800nm, 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, 200-1100nm, 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
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)	$\pm 0.25\% \pm 20\text{ p}$							
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/cm ²)	30				1 kW/cm ²	28 kW/cm ²	20 kW/cm ²	30
Calibration Uncertainty	3.4% @ 190-300nm, 1.65% @ 300-430nm, 1.1% @ 430-1000nm	1.65% @ 400-430nm, 1.1% @ 430-1000nm, 4.3% @ 1035-1065nm		2.4% @ 780-1430nm, 2.6% @ 1430-1600nm	$\pm 1.9\%$			3.4% @ 190-300nm 1.65% @ 300-430nm 1.1% @ 430-1000nm
Maximum Measurable Power	1.5W	2 W		1.3 W	3 W	10 W	30 W	1.5W
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				5mW (200-400 nm); 2.5mW (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
Power Meter	1919-R				843-R-USB	844-PE-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					NA
Detector	818-UV/DB	818-SL/DB	918D-SL-OD3R	919P-003-10	818-SL/DB	818-SL/DB
Wavelength Range	190 to 1100nm	400 to 1100 nm	400 to 1100 nm	0.19 to 11 μm	400 to 1100 nm	400 to 1100 nm
Maximum Power Density	30 W/cm ²			1 kW/cm ²	30 W/cm ²	
Calibration Uncertainty	3.4% @ 190 to 300nm, 1.65% @ 300 to 430nm, 1.1% @ 430 to 1000nm, 4.3% @ 1035 to 1065nm	1.65% @ 400 to 430nm, 1.1% @ 430 to 1000nm, 4.3% @ 1035 to 1065nm	1.65% @ 400 to 430nm 1.1% @ 430 to 1000nm 4.3% @ 1035 to 1065nm	±1.9%	1.65% @ 400 to 430nm, 1.1% @ 430 to 1000nm, 4.3% @ 1035 to 1065nm	1.65% @ 400 to 430nm, 1.1% @ 430 to 1000nm, 4.3% @ 1035 to 1065nm
Maximum Measurable Power	1.5W	2W	2W	3W	2W	2W
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
Minimum Detectable Power	20 pW	20 pW	20 pW	40 μW	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

* New ordering options will have minimum order quantity.