

Comparison of REED Light Meters



MODEL	R1930	LM-81LX	R1630	R8130	R8140	R8100SD
Measuring Ranges	Lux: 0 to 199,999; Fc: 0 to 18,580	Lux: 0 to 20,000; Fc: 0 to 2,000	Lux: 0 to 100,000; Fc: 0 to 9,290	Lux: 0 to 400,000; Fc: 0 to 40,000	Lux: 0 to 199,900; Fc: 0 to 19,990	Lux: 2,000, 20,000, 100,000; Fc: 200, 2,000, 10,000; Type K Temperature: -148.0 to 2372.0°F (-100.0 to 1300°C); Type J Temperature: -148.0 to 2192.0°F (-100.0 to 1200°C)
Accuracy	0 to 9999 Lux (0 to 929 Fc): ±(4% rdg + 8 dgt) ≥10,000 Lux (≥1000 Fc): ±(5% rdg + 10 dgt) ≥100,000 Lux (≥9999 Fc): ±(5% rdg + 10 dgt) 0 to 9999 Fc: Fc = Lux/10.76 ≥10,000 Fc: Fc = Lux/10.76	±(5% rdg + 8 dgt)	≤10,000 Lux (929 Fc): ±(3.5% rdg.+ 10 dgt) >10,000 Lux (929 Fc): ±(5% rdg + 10 dgt)	±(5% rdg + 0.5% FS)	Incandescent Light: ±(3% rdg + 5 dgt); Other Visible Light: ±8% rdg	Lux: ±(4% rdg + 2 dgt); Fc: <2,000: ±(4% rdg + 2 dgt); 2,000 to 10,000: ±(4% rdg + 20 dgt); Temp.: ±(0.4% rdg + 0.5°F (1.0°C))
Resolution	Lux: 1, 10, 100 Fc: 1, 100	Lux: 1, 10 Fc: 0.1, 1	Lux: 0.1, 1, 10, 100 Fc: 0.1, 1, 10	Lux/Fc: 0.1	Lux: 0.1 Fc: 0.01	Lux: 1, 10, 100; Fc: 0.1, 1, 10; Temp.: 0.1°F (0.1°C)
Response Time	<1 sec.	<1 sec.	1.3 times/sec.	Bargraph: 13.3 times/sec. Numeric display: 1.3 times/sec.	500mS	<1 sec.
Sensor Type	Silicon photocell	Photo diode & color correction filter	Photo diode with spectral response filter	Photo diode with spectral response filter	Photo diode & color correction filter; Cosine corrected	Photo diode & color correction filter
Autoranging	N/A	Yes	Yes	No (Manual)	Yes (Auto and Manual)	Yes
Display	4-digit LCD	5-digit LCD	4-digit LCD	4-digit LCD	6-digit LCD	5-digit LCD
Display Backlight	Yes	N/A	Yes	Yes	Yes	Yes
Data Hold	Yes	Yes	Yes	Yes	Yes	Yes
Min	Yes	Yes	N/A	Yes	Yes	Yes
Max	Yes	Yes	N/A	Yes	Yes	Yes
Auto Zero	N/A	Yes	N/A	N/A	N/A	Yes
Overrange Indicator	Yes	Yes	Yes	Yes	Yes	Yes
Datalogging Capabilities	N/A	N/A	Yes (w/ Smart Series App)	N/A	N/A	Yes
Real-Time Clock and Date Stamp	N/A	N/A	Yes (w/ Smart Series App)	N/A	N/A	Yes
Sampling Rate	2 times/sec.	1 time/sec.	Yes (Customizable)	N/A	N/A	Yes (1, 2, 5, 10, 30, 60, 120, 300, 600, 1800, 3600s)
Internal Memory	N/A	Yes	N/A	N/A	N/A	N/A
External Memory	N/A	N/A	N/A	N/A	N/A	Yes, expandable up to 16Gb with SD card (optional)
Auto Shut-off	Yes (after 5 mins)	Yes (after 10 mins)	Yes (Adjustable)	Yes (after 30 mins)	Yes (after 30 mins)	Yes (after 10 mins)
Kick Stand	N/A	N/A	N/A	N/A	N/A	Yes
Tripod Mountable	N/A	N/A	Yes	N/A	N/A	Yes
Magnetic Backing	N/A	N/A	Yes	N/A	N/A	N/A
Low Battery Indicator	Yes	Yes	Yes	Yes	Yes	Yes
Power Supply	3 x AAA Batteries	9V Battery	4 x AAA Batteries	9V Battery	2 x AA Batteries	6 x AA batteries or AC Adapter (optional)
Battery Life	N/A	N/A	Approx. 50 hours (Sampling Time Dependent)	N/A	Approx. 80 hours	N/A (Sampling Time Dependent)
Output	N/A	N/A	Bluetooth® 5.0	N/A	N/A	Yes (AC)
Bluetooth® Range	N/A	N/A	Up to 246' (75m)	N/A	N/A	N/A
Max # of Connected Devices	N/A	N/A	6	N/A	N/A	N/A
PC Connectivity	N/A	N/A	N/A	N/A	N/A	N/A
Software	N/A	N/A	REED Smart Series App	N/A	N/A	N/A
Software OS Compatability	N/A	N/A	IOS, Android	N/A	N/A	N/A
App Supported Languages	N/A	N/A	English, French	N/A	N/A	N/A
Product Certifications	CE	CE	CE, UKCA, FCC, IC ID	CE	CE, RoHS	CE
Operating Temperature	32 to 122°F (0 to 50°C)	32 to 122°F (0 to 50°C)	-4 to 122°F (-20 to 50°C)	32 to 104°F (0 to 40°C)	32 to 104°F (0 to 40°C)	32 to 122°F (0 to 50°C)
Storage Temperature	14 to 140°F (-10 to 60°C)	14 to 140°F (-10 to 60°C)	-4 to 140°F (-20 to 60°C)	14 to 122°F (-10 to 50°C)	14 to 122°F (-10 to 50°C)	14 to 140°F (-10 to 60°C)
Operating Humidity	10 to 80% RH	10 to 80% RH	10 to 90% RH	10 to 80% RH	10 to 80% RH	10 to 80% RH
Operating Altitude	6561' (2000m)	6561' (2000m)	6561' (2000m)	6561' (2000m)	6561' (2000m)	6561' (2000m)
Dimensions	6.3 x 1.9 x 1.1" (160 x 50 x 28mm)	6.1 x 2.4 x 1.3" (156 x 60 x 33mm)	6.9 x 1.5 x 1" (175 x 38 x 25mm)	7.4 x 2.5 x 1" (188 x 63 x 24.5mm)	6.7 x 2.5 x 1.5" (169 x 63 x 37mm)	7 x 2.7 x 1.9" (117 x 68 x 45mm)
Weight	4.2 oz (118g)	5.6 oz (160g)	3.4 oz (95g)	14.2 oz (403g)	7.4 oz (210g)	17.3 oz (489g)

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