



The PR-524 LiteMate Photometer

The PR-524 represents the next generation in portable, hand-held photometry. With the PR-524, instrument set-up, measurement preferences and results are all accessed from the 1.5" x 2.3" back-lit touch screen LCD. The only 'button' on the PR-524 is the measure button.

Once measurements are finished, they can be stored on an MMC or SD. Then, data can be transferred to a PC via the USB interface, or by removing the MMC or SD and using a card reader connected to the PC. Measuring refreshing sources? The PR-524 automatically synchronizes to non-DC signals. The PR-524 can be triggered remotely, and once triggered, will send a pulse to a remote device such as a xenon strobe. This way, single event sources can be measured.



PR-514 Remote Head

If the application requires a measurement of uniformity, the PR-524 can be fitted with up to 16 remote measuring heads in a daisy chain configuration, all under the control of a PC communicating with the base unit - each remote detector can be individually addressed.



PR-524 LiteMate



PR-522 SpotMate

For luminance measurements, the optional PR-522 SpotMate replaces the standard cosine receptor. The PR-522 features true Pritchard Optics for unambiguous target alignment capability. For measurements that are inaccessible to line-of-sight measurements, an optional fiber probe accessory can be utilized and for applications where it is necessary to make measurements of self emissive devices in an environment where

the ambient light cannot be extinguished, a contact measurement Micro Reader Probe accessory can be employed.



Flexible Probe and Micro Reader Probe

Features

- Illuminance / Luminance Measurements
- Back Lit / Touch Screen Display
- Multi-Media / Secure Digital Storage
- USB Interface
- Multiple Measuring Heads

Applications

- Area Illumination
- Projector Output
- Architectural Lighting
- Projector Uniformity
- Screen Brightness

Standard Equipment

- PR-524 with cosine corrected measuring accessory
- Lithium-ion battery (charges inside PR-524)
- AC Adaptor
- Carrying Case
- Multi Media Card (MMC)



PR-524 LiteMate Specifications

Standard Equipment	PR-524 Photometer with Cosine Receptor Head, Lithium-ion battery, MMC, carrying case, AC Adaptor, MMC (SD) 'Explorer' PC software
Digital Resolution	20 bits
Sync Range	20 to 400 Hz
Measurement Modes	Illuminance (footcandles and lux - standard) Luminance (footlamberts and cd/m ² - optional with PR-522, FP-524 or MR-524)
Options	PR-514 Remote Heads (up to 16), LR-522 SpotMate, FP-524 Fiber Probe, MP-524 Micro Reader Probe
Illuminance Range	0.01 - 300,000 lux (0.001 - 30,000 footcandles)
Illuminance Accuracy	± 2% when measuring NIST traceable illuminance standard at 2856 Kelvin (Illuminant A)
Illuminance Precision	≤ 0.05% at 0.1 lux (0.01 footcandles)
Interface	USB
Measurement Storage	Internal, Multi Media Card (MMC) or Secure Digital (SD) Capacity: Internal: 100 Measurement Buffer (while unit is on). External: For a 64M Card: Approx. 106,000 measurements (approx. 600 bytes per measurement)
Power	Rechargeable lithium ion battery - charges in the PR-524 while connected to the external supply.
Battery Life	6 hours continuous use (without backlight)
PR-522 Specifications 1/2° and 1/4° apertures available. Multiply Luminance Range values by 4 (for 1/2°) and 16 (for 1/4°). Divide Spot Size by 2 (for 1/2°) and 4 (for 1/4°)	Optics: Pritchard Optical System - Through the Lens Alignment Measuring Angle: 1° FOV: 10° Luminance Range: 0.067 to 2,014,000 footlamberts (.23 to 6,900,000 cd/m ²) Working Distance Spot Size 14 in. (356 mm) 0.227 in. (5.77 mm) 10 feet (3.05 m) 2.09 in. (53.1 mm)
Weight	9.0 ounces (255 grams) without battery and PR-522
Dimensions	Main Body: 4.73 x 3.0 in. (17.5 x 7.62 cm) Measuring Head: 2.17 x 3 in. (5.51 x 7.62 cm)



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