

UDT uLUX-LP Illuminance Meter System



This lux meter system includes a low-profile photometric sensor, designed for applications with limited mechanical clearance and an integrated cosine filter for reduced directional sensitivity.

Combined with our highly popular S471 portable photometer, the system provides simple and precise measurements. The package includes a battery charger and necessary connector cables.

Under the UDT Instruments brand, Gamma Scientific manufactures a broad range of precision photometers, radiometers, colorimeters and photosensors for optical measurement application.

Precision-matched Measurement Solutions Optical Power Meter Bundles for a Wide Variety of Applications

S471 Optical Power Meter

- High Accuracy Measurements
- Programmable Average Readings in Low Pass or Boxcar Average
- High Speed Update Rate
- Optional USB to Serial Bridge Converter
- Long Battery Lifetime or Use External Power

268P Photometric Sensor

- Spectral Responsivity Matching that of the Human Eye
- Integrated Cosine Filter to Reduce Directional Sensitivity
- Illuminance Measurements (lux and fc)
- Dynamic Range from 1×10^{-3} to 1.9×10^5 lux

The S471 Optical Power Meter is designed to be used in a laboratory setting or a field environment. The instrument is microprocessor controlled and has three measurement options; direct analog display; RS-232 interface; or analog voltage output. In addition to our exceptional technical and functional capabilities, Gamma Scientific is ISO/IEC 17025 accredited by NVLAP (NVLAP lab code 200823-0).

System Part Number U68411

S471 OPTICAL POWER METER GENERAL SPECIFICATIONS	
Electronic	7 Gains, auto/manual selection
Computer Interfaces	RS-232 or USB
Sample rates	(Display Enabled) > 2 Hz (Display Disabled) up to 53 Hz
Analog Output Scale	± 1, 2, or 4 VDC
Communication Rate	9600 Baud
Operational Battery Life	32 Hours with backlight off, 24 Hours with backlight on
Operating Temperature	10 to 60° C
Storage Temperature	-20 to 35° C for up to 1 year
External Power Source	12 VDC at 3.3 A or 100-240 VAC 50/60 Hz with supplied power adaptor, 40 W max
Internal Power Source	Rechargeable integral battery pack -- 5 NiMH AA, 1800 mAHr batteries
Calibration Capacity	9 Continuous or 50 single-point
Calibration Traceability	Traceable to NIST with optional ISO/IEC 17025 accredited
Relative Humidity	Up to 99% (non-condensing)
Regulatory Compliance	TUV, UL, CSA, CE

268P LOW PROFILE PHOTOMETRIC SILICON DETECTOR GENERAL SPECIFICATIONS	
CIE V (λ) Function	< f1' ≤ 3%
Active Area	1 cm ²
Dynamic Range ⁽¹⁾	1 x 10 ⁻³ to 2 x 10 ⁴ lux
Typical Response ⁽¹⁾	7.3 x 10 ⁻¹⁰ A / lux @ 555 nm
Calibration	ISO17025, NIST Traceable
Cable	1.5 meter, included

(1) Stand alone with cosine receptor. Value may differ when used with cosine receptor removed.

