

Model S471 Portable Optometer

PRODUCT SUMMARY

Introducing the latest optometer from UDT Instruments — the Model S471. This new handheld instrument, ideal for all your photometric, radiometric and fiberoptic measurement needs, is designed to be used in a laboratory setting or field environment. The Model S471 is microprocessor controlled and has three measurement data-presentation options: direct display measurement with analog bar; RS-232 computer interface and analog voltage input.

In addition to its exceptional technical and functional characteristics, this system is fully compatible with all UDT Instruments sensor heads in any configuration. All calibrations are traceable to the National Institute of Standards and Technology (NIST).

PRELIMINARY SPECIFICATIONS

Display

Monochrome graphic 128x64 dot chip-on-glass LCD module

Displayed Precision

Up to 5 digits

Display Update Rate

2 readings per second

Display Modes

Linear / Log

Display Modes (Analog)

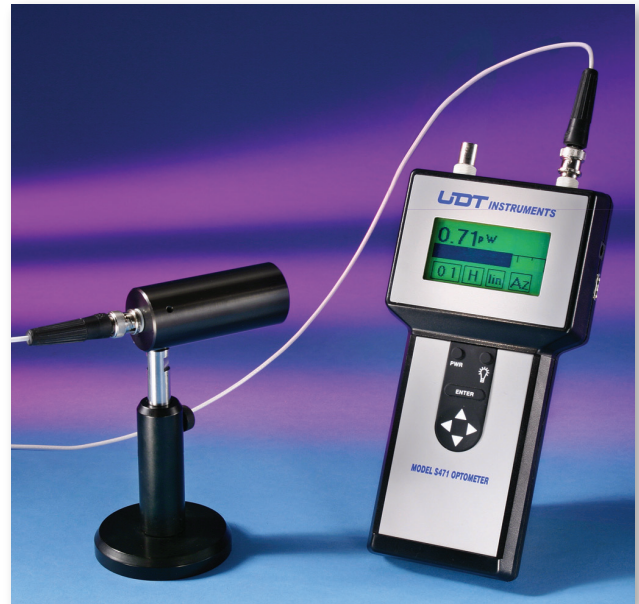
Bar graph with respect to power input or power measured

Bandwidth

7.5 Hz

Sensor Configuration

Compatible with all UDT Instruments sensors



FEATURES

- High-accuracy measurements
- Wide dynamic range
- Computerized high-speed update rate
- Programmable averaging readings in low pass or boxcar average
- Large calibration capacity
- Large monochrome LCD graphics/backlit
- Calibration data/accessories information display
- Long operational battery life or direct external power
- Simple touch keypad
- Portable and durable
- Optional USB to serial bridge converter

COMPATIBILITY

The Model S471 is fully compatible with all UDT Instruments sensor heads.

UDT INSTRUMENTS

8581 Aero Drive, San Diego, CA 92123
Phone (858) 279-8035 Fax (858) 576-9286
Website: www.udtinstruments.com

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SPECIFICATIONS

Accuracy/Precision

	Full Scale	A to D Converter Resolution	Measurement \pm (% of full scale)
A	4.12 mA	8 nA	\pm .01%
B	412 μ A	800 pA	\pm .02%
C	41.2 μ A	80 pA	\pm .02%
D	4.13 μ A	8 pA	\pm .01%
E	416 nA	800 fA	\pm .04%
F	45.4 nA	87 fA	\pm .01%
G	4.12 nA	8 fA	\pm .01%

Update Rates

RS-232 (Display Enabled) > 2 times per second
RS-232 (Display Disabled) Up to 53 times per second

Measurement

Direct measurement, RS-232 interface and analog output

Analog Output

\pm 4.0 Volts

Communication Rate

9600 Baud

Operational Battery Life (with new batteries)

Backlight Off .. 32 hours
Backlight On .. 24 hours

Operating Temperature Range

10°C to 60°C

Storage Temperature Range

-20°C to 35°C for < 1 year

Power Source (AC)

Universal input desktop power supply
100-240V, 7A, 50-60 Hz
TUV, CSA, UL, CE Approved

Calibration Capacity

9 continuous calibrations or 50 single-point calibrations

Calibration Traceability

All calibrations traceable to the National Institute of Standards and Technology (NIST)

Power Source (DC)

Rechargeable integral battery pack
Five NiMH AA, 1800-mAhr batteries

Recharge Time

< 4 hours

Power Supply Output

+12v DC 2.5A
(Center Conductor Positive)

Power Supply Dimensions

Height 41 mm (1.63")
Width 59 mm (2.3")
Length. 112 mm (4.4")
Weight 267 g (0.59 lb)
Cable Length.. 1.04 m (41.0")

Display Unit Dimensions

Height 36 mm (1.4")
Width 114 mm (4.5")
Length. 234 mm (9.25")
Weight 590 g (1.3 lb)

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