

UDT Series 19830-3-FLEX Sensor Head



The UDT 19830-3-xx-FLEX Series from Gamma Scientific includes thermoelectrically cooled photodetector heads that work in conjunction with our model 400-C Series optical meters to measure a wide variety of light levels. These photodetector heads provide direct readings in the spectral range of 200 to 1800 nm and feature active temperature control.

Our wide range of light measurement tools is complemented by ISO/IEC 17025 accreditation by NVLAP (NVLAP lab code 200823-0), resulting in unmatched performance and custom configuration as required.

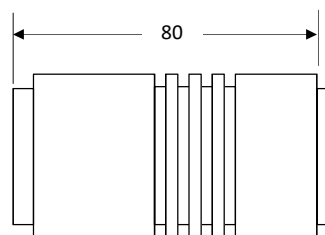
Sensor Specifications

Wavelength Range	190 to 1100 nm ⁽¹⁾
Photodetector Type	Silicon
Active Area	5.8 mm x 5.8 mm
Dynamic Range (Irradiance)	35.8×10^{-12} to 4.18×10^{-1} Watts
Peak Response (Irradiance)	4.191×10^{-3} A/W/cm ² @ 980 nm Peak λ 980 nm with Opal diffuser
Aperture	3.5 mm
Photo Sensitivity at Peak	0.5 A/W at 960 nm
Cooling Temperature	35° C
Operating Temperature	20 to 60° C
Storage Temperature	-20 to + 80° C
Calibration	ISO17025, NIST Traceable
Available Accessories	Quartz diffuser
(1) Quartz diffuser required for UV operation	

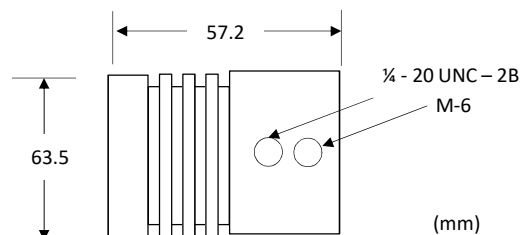
Sensor Specifications, continued

Number of TE Coolers	1
Reverse Voltage (max)	5 V
Shunt Resistance	0.4 G Ω
Window Material	Sapphire
Short Circuit Current at 100 lx	28 μ A
Dark Current	25 pA @ 10 mV reverse voltage
Temp Coefficient, Dark Current	1.15 x per °C
Rise Time	1 μ sec Reverse Voltage 0 V, Load 1k Ω
Terminal Capacitance	380 pF Reverse Voltage 0V, 10 kHz
Noise Equivalent Power	1.3×10^{-14} W/Hz

Specifications are subject to change without notice.



Sensor Head



Coupling Interface Mass