

PhotriX™

For OEM Applications

OPTICAL PYROMETRY

The *PhotriX* line of sensors from Luxtron offer best-in-class radiation pyrometry in an incredibly small package. Designed specifically for OEM applications, the *PhotriX* sensors have the industry's best signal-to-noise ratio in an electronics package that measures less than 26mm (1") in diameter and less than 127mm (5") length.

Like all pyrometers, the *PhotriX* sensors measure the thermal radiation of an object and convert this to a calibrated temperature. What sets the *PhotriX* sensors apart is their unmatched sensitivity enabling measurement of signals as minute as 1-fA (10^{-15}). This capability allows the *PhotriX* sensors to measure lower temperatures with greater precision.

PhotriX sensors are ideal for semiconductor and other advanced material applications where the user requires precise temperature control of a process to maximize yield and improve product quality. The *PhotriX* line offers two forms of collection optics, lightpipe and lens. Both offer a number of standard optical settings and are easily customized to suit specific application requirements.

Lightpipe optics are fabricated from single-crystal sapphire rods and can be inserted directly into process chambers through small holes or vacuum fittings. Lens optics can be used to look through chamber viewports or windows and focus to measure a small spot on the hot object from a distance (standard working distances are 75, 150, 300, 500 and 1000 mm).

- **Lowest Temperature Capability**
- **Exceptional Stability**
- **Unmatched Precision**
- **Fast Response, up to 1 kHz**
- **Compact OEM design**



With over 25 years experience providing temperature measurement solutions for the most demanding and hostile applications, Luxtron specializes in OEM integration. Our highly experienced team of applications engineers provide custom design and integration support to adapt Luxtron's technologies to your application.

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Features

Model	LP		PY	
Input Optics	Lightpipe		Pyrometer	
Wavelength	900 nm	700 - 1650nm	900nm	700 - 1650 nm
Temperature Range	190 - 1180 °C 225 - 1400 °C	28 - 620 °C 35 - 700 °C	275 - 1800 °C 400 - 3000 °C	65 - 1100 °C
Precision	<0.01 °C above 400 °C (1 σ at 1 Hz)			
Accuracy	± 1.5 °C or 0.15 % of reading			
Repeatability	< 0.15 °C per year drift			
Output	RS-232 (Standard); Analog Output (Optional)			
Ambient Range	10-60 °C			
Dimensions	25.4 mm diameter, 127 mm length		35.0 mm diameter, 178 mm length	
Weight	310 grams		500 grams	
Power	110 / 220 VAC, 50 Hz and 60 Hz			
Available Accessories	Fiberoptic Cable Sensor Gas Purge Light Pipe Sheath Multi-channel PC Interface		Fiberoptic Cable Multi-channel PC Interface	

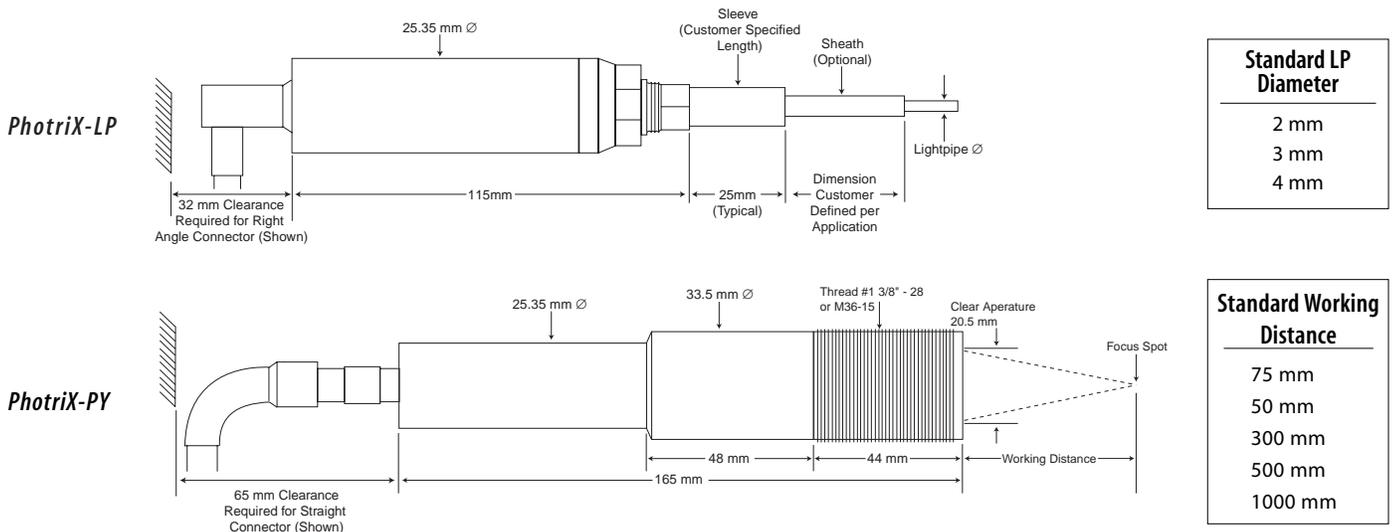


PhotriX-LP



PhotriX-PY

Sensor Dimensions



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3033 Scott Boulevard, Santa Clara, CA 95054-3316
408.727.1600 tel 408.727.1677 fax
www.luxtron.com



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Contact your local Luxtron sales representative or distributor for more information.

