FLUOROPTIC® THERMOMETER

Probes and Accessories

Immune, Accurate and Safe in Hostile Environments

Luxtron is the world's leading designer and manufacturer of fiber optic temperature sensors. Luxtron's unique and patented Fluoroptic sensing technology lends itself well to variation in probe construction and is easily customized for OEMs.

Fluoroptic technology takes advantage of optical properties inherent in phosphorescent materials (a.k.a. phosphors). The instrument determines the temperature of the sensor by measuring the decay time of its emitted light. This decay time is a persistent property of the sensor and it varies precisely with temperature.

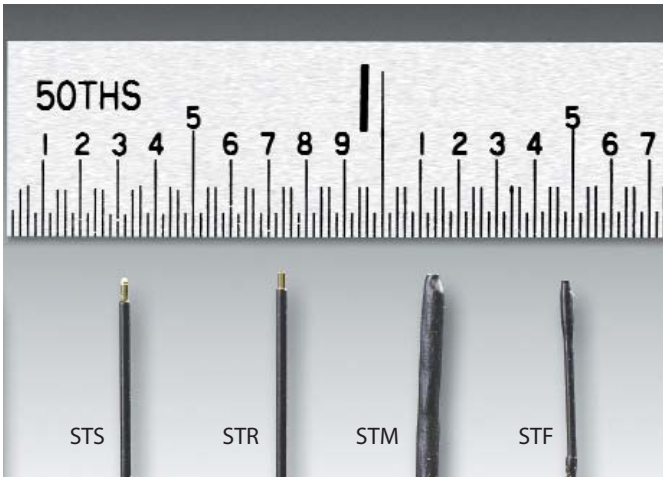
Fiber Optic Probes for Every Application

Luxtron offers a full line of standard Fluoroptic® probes each designed for different uses and measurement methods. Detailed performance specifications for probes and accessories are located on the back.

Probe Type	General Immersion	Surface Contact	Remote Sensing
STM	X		
STF	X		
STR			X
STS		X	

Unique Probe Measurement Possibilities

In addition to the standard advantages of fiber optic probes, a distinctive feature of Luxtron's Fluoroptic probes is that the sensing material (a ceramic powder) can be formed and applied in almost infinite shapes and by various means.. Options include ruggedized probes for special applications and specialized probes for medical and electric power industries.



Magnified picture (2x) of Luxtron's standard probe sensing tips/

Benefits

- *Immune to EMI, RF, and Microwave interference*
  - *Chemically resistant PFA Jacket with Kevlar® protection*
- *Resistant to corrosion*
  - *All non-metallic parts*
- *Safe for flammable or explosive environments*
  - *No transmission of electrical current or sparks*
- *Stable and Inert Sensor*

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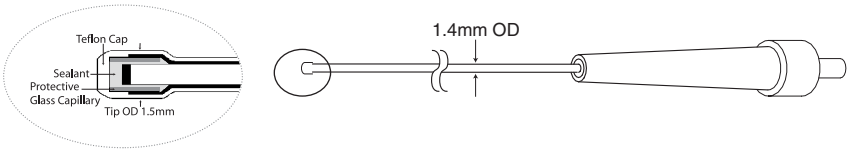
Probes and extension cables are available in 2, 5, and 10 meter lengths unless otherwise specified.

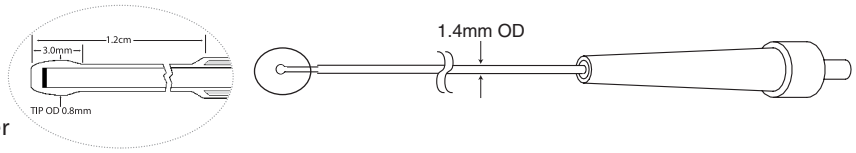
STM Probe

Application	General purpose immersion
Temperature Range	-25 to 250°C *
Response Time	5 seconds still air; 0.7 seconds in stirred water



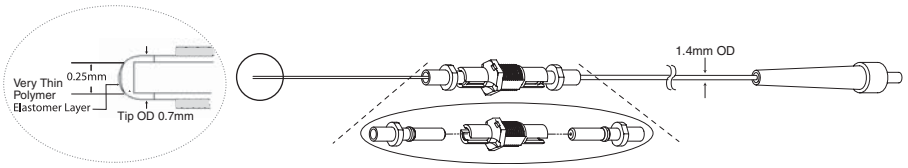
STF Probe

Application	Fast response immersion
Temperature Range	0 to 295°C *
Response Time	1.25 seconds still air; 250 milliseconds in stirred water



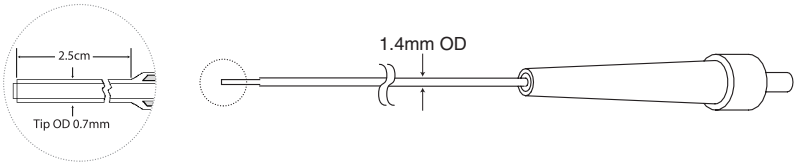
STS Probe Kit

Application	Surface contact
Temperature Range	-25 to 200°C
Response Time	25 milliseconds
Kit Includes	2m or 5m probe and two 10cm replaceable tips (tip OD 0.7mm)



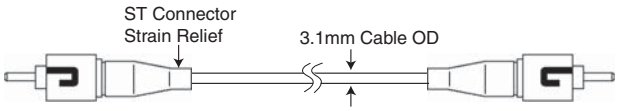
STR Probe Kit

Application	Non-contact remote sensing
Temperature Range	-25 to 330°C
Kit includes	Alpha phosphor material, three types of binders, 2m blank probe, and Remote Sensing User's Guide



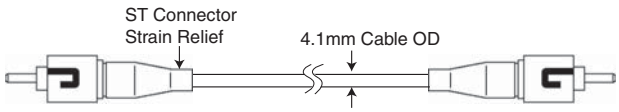
SST Extension Cable

Application	General purpose fiber optic extension cable
Fiber Type	400µm HCS with ST connectors



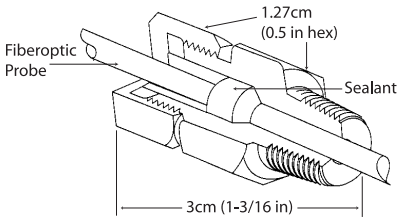
HST Extension Cable

Application	Heavy duty fiber optic extension cable
Fiber Type	600µm HCS with ST connectors



Compression Gland Feedthrough

Material	304 Stainless
Compatabile Probes	STM, ST, and STR
Temperature Range	-20 to 230°C
Maximum Vacuum	5e10^{-6} Torr
Maximum Pressure	3,000psi
Sealing Gland	Viton



* These probes can be special ordered to measure temperatures as low as -200°C.

LUXTRON
Direct, Dynamic, Real Time

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