The Simplified Fiber Optic Temperature Sensor

HIGHLIGHTS

- **RF/EMI/MW Immune**
- **Low Thermal Mass**
- **Miniature**
- **Intrinsically Safe**
- **LumiSmart® Connector**

Description

The X5-Blue sensor is a fiber optic thermomether that is immune to Electromagnetic interferences, Radio Frequencies and Microwaves. RF and MW are present in a broad variety of applications, and the X5 line of fiber optic sensors gets along very well with this portion of the electromagnetic spectrum.

Applications

- Healthcare, MRI, RF/MW ablation
- Energy, power transport & distribution
- Industrial realtime monitoring
- Chemical reactions
- Microwave processes

Other Models

The X5 line of sensors offers different models with complementary specifications to suit your distinctive needs.

To suit a broad variety of different applications, other X5 standard and custom sensors are available. Visit our website or contact us for details.

Accurate

X5 sensors use the recognized fluorescence decay temperature sensing principle to provide Fast, Accurate and Consistent temperature measurement in harsh environments. Our sensors are the most accurate fiber optic sensors on the market today.

Affordable

The X5 line has benefitted from recent improvements in components manufacturing. Because of this, IPITEK was able to design an extremely high-quality product with one idea in mind: Your Budget. Many applications that would benefit from the use of optical sensors cannot justify the investment in high-priced equipment offered by legacy vendors. IPITEK's Lumitherm X5 addresses just that issue.

Simple

There's no reason for it to be complicated, after all, it's just a thermometer. With its LumiSmart connector, the X5 sensor is easier to use than a thermocouple and ready to use in just three simple steps:

Unwrap it - Plug it in - Read

IPITEK
INTEGRATED PHOTONICS TECHNOLOGY

SPECIFICATIONS

Temperature range: -40 to 120°C
Accuracy: ±1°C
Resolution: 0.1°C
Probe material: PTFE® walled tube
Fiber Type: 300 µm glass fiber
Connector Type: LumiSmart
Cable Length: 2 meters (other lengths available)
Readout: 1 to 28 channels

Benchtop
1 to 4 Channels

Rack Mount
4 to 28 Channels

OEM Board
1 to 4 Channels

(Click button to view data sheet)

X5 TECHNOLOGY

LumiTherm X5 Technology uses a fluorescence-decay process. Since fluorescence decay is a fundamental atomic property of phosphors, it can accurately determine temperature and remains ultra-stable for years.

OTHER SENSORS
(click button to view data sheet)

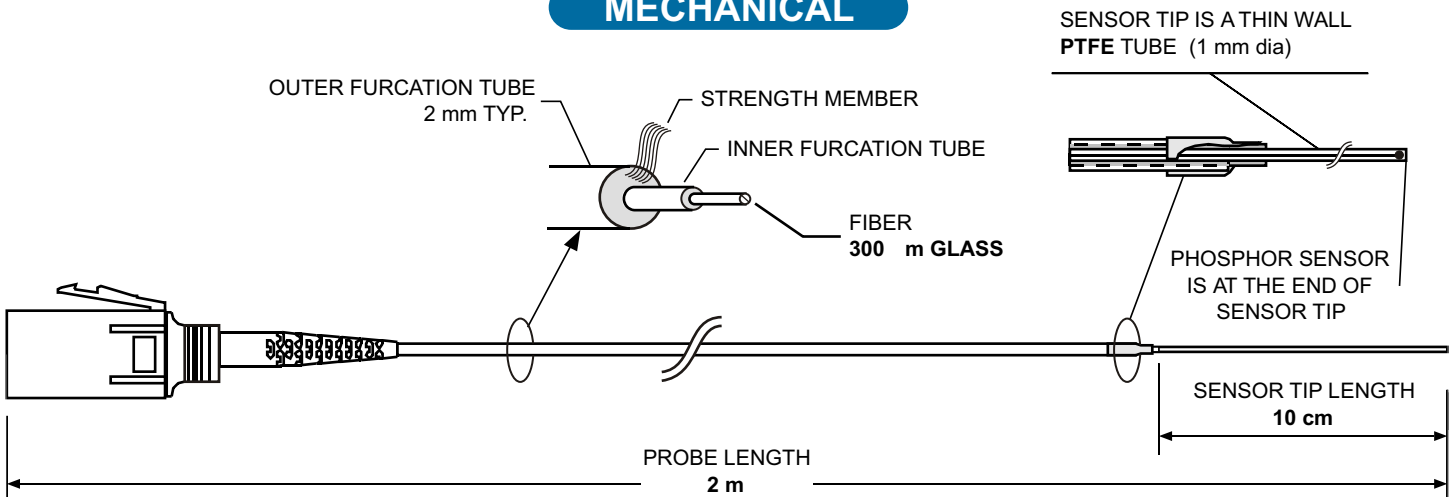| X5-TRUE	Range: 0 to 80°C Accuracy: ±0.2°C
X5-RED	Range: -40° to 250°C Accuracy: ±1°C

LumiSmart CONNECTOR

X5 Sensors are equipped with a LumiSmart connector containing an embedded microchip that stores the sensor's calibration data. This way, you never have to worry about identifying the sensor to the signal conditioner or type in any calibration factor. It's as simple as "plug-and-read."

MECHANICAL

SENSOR TIP IS A THIN WALL **PTFE** TUBE (1 mm dia)

OUTER FURCATION TUBE 2 mm TYP.

STRENGTH MEMBER

INNER FURCATION TUBE

FIBER **300 m GLASS**

PHOSPHOR SENSOR IS AT THE END OF SENSOR TIP

SENSOR TIP LENGTH **10 cm**

PROBE LENGTH **2 m**

ORDERING INFORMATION

LT-X5BS	-	XX	-	XX

Lumitherm X5 Blue Sensor

Cable
02 = 2 meters
05 = 5 meters
10 = 10 meters
*other lengths available by request

Tip Length
05 = 5 cm
10 = 10 cm
15 = 15cm
*other lengths available by request

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