

COMPACT SIZE
IMMUNE TO EMI / RFI
HIGH ACCURACY

The FOT-M is a high accuracy and compact sized Fiber Optic Temperature Sensor. It is designed to work under harsh environments.

Description

The **FOT-M** temperature sensor combines all the desired characteristics you would expect from the ideal sensor. Its compact size, immunity to microwave and RF, resistance to corrosion, high accuracy and reliability make it the best choice for temperature measurements in harsh environments.

FISO's **FOT-M** fiber optic temperature sensor features complete immunity to EMI and RFI, built-in safety for medical applications, and high accuracy for temperature measurement. The **FOT-M** temperature sensor offers a high accuracy for demanding applications.

The **FOT-M** temperature sensor is designed to measure temperature under all conditions of EMI, humidity and vibration, the system delivers reliable temperature measurements under the most adverse situations. For those extreme conditions, the fiber optic lead cable is available in different types.

The **FOT-M** fiber optic temperature sensor is based on proven Fabry-Perot interferometer technology. The sensor's unique design is based on deflection measurement of a silicon diaphragm, as opposed to more conventional temperature measurement techniques. Changes in temperature create a variation in the length of the Fabry-Perot cavity and our fiber optic signal conditioners can consistently measure the cavity length with high accuracy under all adverse conditions of temperature, EMI, humidity and vibration.

In addition to the advantages inherent to fiber optic sensors, our white light interrogation technique assures highly accurate and reliable measurements.

Key Features

- Intrinsically safe
- Immune to EMI/RFI
- Up to 85°C (180°F)
- Accuracy of $\pm 0.3^{\circ}\text{C}$
- Miniature and rugged sensor
- Fast response time

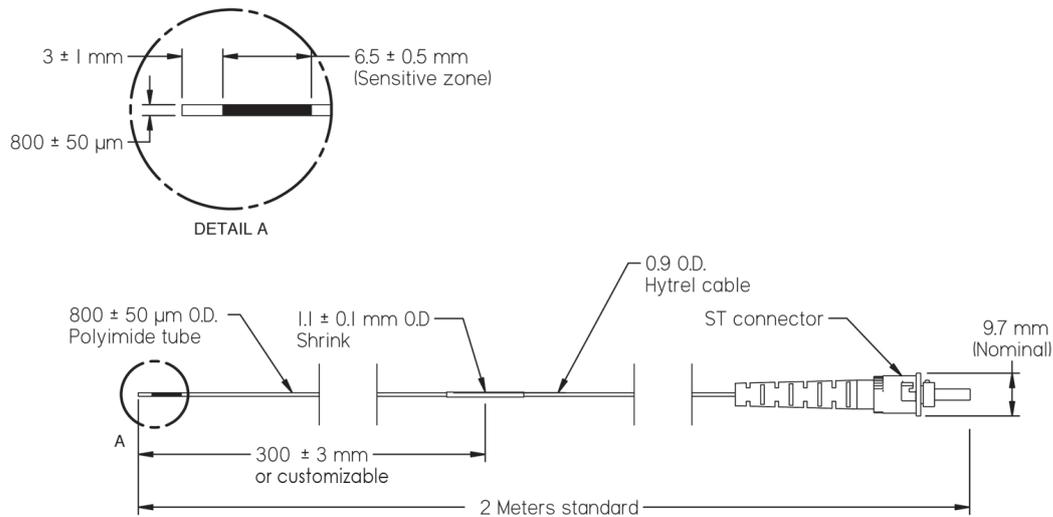
Applications

- Industrial environments
- Harsh and hazardous environments
- MRI environment
- Medical applications
- Immune to microwaves and RF

Specifications

Temperature range	20°C to 85°C (68°F to 185°F)
Resolution ¹	0.1°C
Accuracy	±0.3°C
Response time	Less than 750 ms
Connector type	ST connector

¹ - Signal conditioner dependent



Ordering Information

Please specify:

- Length of exposed Polyimide tube
- Cable length
- Readout