

# Fiber Bragg Grating Temperature Sensor – Standard Configuration

**TMP2**

## Applications

Monitor temperature in harsh or sensitive environments

Thermal monitoring for civil, aerospace, marine, and other structures

## Features

Multiplexible - FBG-based design allows for serial multiplexing

Wavelengths available: 1525 - 1565 nm and 815 - 865 nm

Small size

FC connectors (typical), others available on request

Strain isolated packaging

## Description

Optical Fiber Bragg Grating (FBG) sensors respond to strain and temperature by a shift in their optical wavelength. Aither Engineering, Inc.'s (AEI) Temperature sensor design allows for a temperature measurement below 1 °C resolution depending on the instrumentation system. The strain isolated packaging allows for measurement of only temperature change (no thermal apparent strain of packaging material). Small size allows for rapid temperature response. Embedded connectors in the TMP2 design allows for quick connection to instrumentation.

# TMP#

# Fiber Bragg Grating Temperature Sensor

The robust packaging can withstand the rough handling of sensors often experienced in many outside-the-lab testing environments.

This product can be easily combined with AEI's other sensing products to provide a complete sensing system for monitoring the structural response (thermal, strain, and acceleration) for almost any application.



## Selected Specifications

Temperature range	-40 to 150 °C
Temperature Rate	15 °C/min
Resolution*	~0.1 °C

\* Dependent on instrumentation

### Ordering information

Product number:

TMP2- $\alpha$ - $\beta$ - $\alpha$ -AEI

$\alpha$  - Connector style

0 - no connector

1 - FC/PC

2 - FC/APC

3 - ST

4 - SC

$\beta$  - Wavelength range

800 or 1550

You may request a specific

Bragg wavelength, please ask for details

Example: TMP2-1-1550-1-AEI

Custom designed sensors can be produced upon request. For more information please contact us at:

Aither Engineering, Inc.  
4865 Walden Lane  
Lanham, MD 20706

Phone: 240.296.1300  
Fax: 240.296.1306

Email: [info@aitherengineering.com](mailto:info@aitherengineering.com)



[www.aitherengineering.com](http://www.aitherengineering.com)