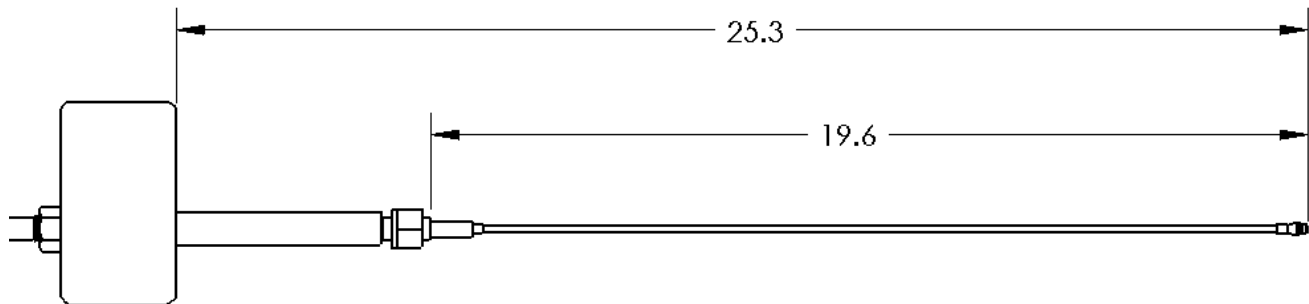


## Model GT1200 501 Transducer Fiber Optic Combustion Dynamics Monitoring



**DavidsonSensors™ provide the safest, most reliable and cost-effective instrumentation for harsh industrial applications.**

This product data sheet describes Model GT1200 501 Transducer. This temperature tolerant transducer has been designed for combustion dynamics monitoring use in Siemens 501 gas turbines and does not require any modification to the engine.

### Performance Specifications

#### Frequency Response

2 Hz to 10 kHz +/- 0.4 dB

#### Transducer Temperature Limit

1000° F

#### Cable Temperature Limit

180° F

**Transducers** - Davidson fiber optic pressure pulsation transducers model GT1200 501 has a flexible probe and was designed for installation in the "J" tube along side the combustor basket. Installation does not require any modification to the engine. When fully inserted into the engine, the pressure diaphragm is located within ¼" of the end of the J-Tube making a direct measurement and minimizing distortion.



Figure 1 – GT1200-501 Transducer Housing

The GT1200 501 has a six (6) foot stainless steel braided cable rated for 180°F. The cables are terminated with rugged fiber optic connectors located in the cable conduit around the engine.

## Calibration

Standard calibration includes the following:

Each transducer is calibrated at the factory at room temperature at dynamic pressure of 0.5 psi at 200 Hz.

A field calibration kit is available as an optional accessory to the CDMS.

## Documentation

Calibration data sheets are provided for each transducer. A calibration sensitivity curve is provided with each transducer showing its sensitivity at temperatures from 0 to 1000° F

## Tagging

Stainless steel tags will be permanently attached to each transducer upon request.

## Safety (Transducer with Cable)

Intrinsically-safe and suitable for use in:

- Class I, Division 1, Groups B, C, and D
- Class II, Division 1, Groups E, F, and G
- Class III, Division 1

## Other Applications

For information about other Davidson products, see [www.davidson-instruments.com](http://www.davidson-instruments.com)

## Guide to Configuring a Fiber Optic Sensing System

For information to assist you in planning a fiber optic sensing system, see

[www.davidson-instruments.com](http://www.davidson-instruments.com)

U.S. Patents Pending

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