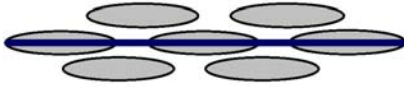


Oxsensis



multi parameter optical sensing

Wave-Phire™ Dynamic Pressure Transducer Type - DPT950



COMPETITIVE FEATURES

- Extreme temperature operation in excess of 1000°C
- Resolution of 10^{-5} of full scale static pressure
- Operates under aggressive chemical and mechanical atmospheres and immune to high levels of EMI
- Closer proximity to combustion events allows a much larger bandwidth to be reliably monitored and also earlier detection of dynamic events
- Ultimately aimed for closed loop combustion dynamics control

OVERVIEW

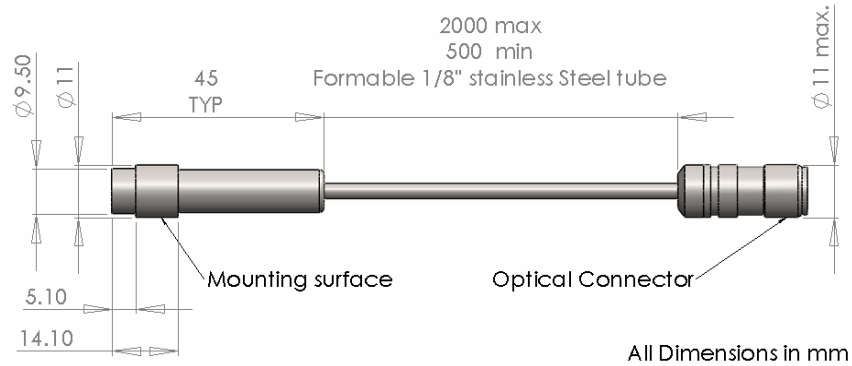
The Wave-Phire™ incorporates a micro-machined sapphire sensor head packaged with a high temperature fiber-optic lead-out to form a unique sensor configuration.

The properties of the Wave-Phire™ make it attractive for harsh atmospheres such as gas turbines and other combustion environments. It is aimed at usage in continuous combustion dynamic monitoring or as a design development tool.

TARGET SPECIFICATIONS

- Full scale pressure: 0 – 25bar nominally
Other values available per customer request
- Dynamic Measurement Range: Up to full scale pressure
- Resolution: 10^{-5} of full scale static pressure
- Overload Capacity: 3 times full scale pressure
- Combined uncertainty due to non-linearity, temperature, hysteresis and frequency: $< \pm 10\%$
- Operating Temperature Range: -40 to 1000°C
See table overleaf
- AC Analogue Output: Scalable to $\pm 7V$ p-p via 0.1, 1 and 10 gain control
- Humidity: 0-100% RH
- Optical components immune to EMI
- Corrosion Resistance: Sapphire sensing head chemically inert

MECHANICAL DRAWING

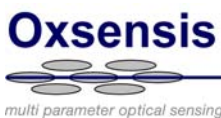
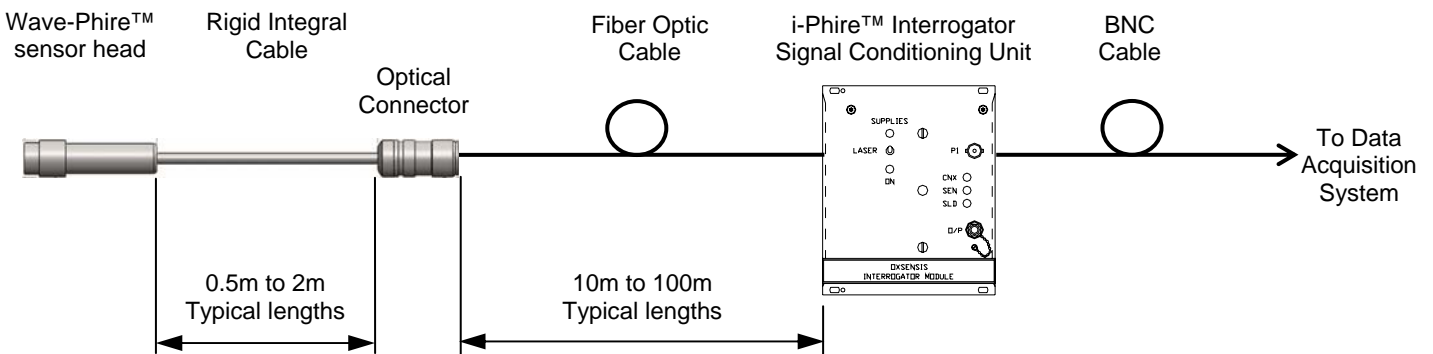


TARGET TEMPERATURE CAPABILITY

Location (Refer to mechanical drawing)	Maximum Temperature (°C)
Sensor front face	1000
Rear of Mounting Surface	500
Optical Connector Housing	150 *

* High temperature connector rated to 350°C under development

COMPLETE SENSING SYSTEM



Oxsensis Limited
Rutherford Appleton Laboratory
Didcot
Oxfordshire OX11 0QX
UK

Tel: +44 (0)1235 77 8120
Fax: +44 (0)1235 778276
www.oxsensis.com

As part of Oxsensis' commitment to ongoing improvements of our products, Oxsensis reserve the right to modify specifications without prior notification.