



Office: 512-772-1553 Fax: 512-532-6130 Email: sales@tandm.net

10 Sensors you don't know about: For tough & tricky Measurement Applications

Here is our pick of the top 10 sensors for tough measurement applications, with links to each datasheet:

1. An accelerometer that can survive 1,200 Deg F – without water or air cooling. Dytran, the manufacturer, imbeds a piece of pure silver into the case of the sensor, which allows it to achieve these temperatures.

[Datasheet #1](#)

2. An IR temperature sensor that can measure 1,292F up to 3,272F. What's even more unique: it can see through dust or steam! The technology behind this is called a "two color ratiometric pyrometer". The manufacturer is Micro-Epsilon.

[Datasheet #2](#)

3. How about measuring vibration with a laser? There are 2 technologies for this: laser vibrometers from OMS Corporation can be used in a lab setting, and Micro-Epsilon has laser displacement sensors for use in an industrial setting.

[Datasheet #3a](#)

[Datasheet #3b](#)

4. A pressure sensor that can detect a 0.01PSI change in differential pressure, over a 5PSI range, with 12,500PSI line pressure! This is made by Validyne over in California.

[Datasheet #4](#)

5. An accelerometer that can measure DC to 10kHz: it's the first of its kind, that acts as both a MEMS and piezoelectric accelerometer. Dytran is the manufacturer of this unit.

[Datasheet #5](#)

6. A flow sensor, that doesn't need flow straighteners! This is a turbine flow meter, with 2 counter-rotating turbines vs. one which gives it some special powers. Cox Instruments offers this type of sensor.

[Datasheet #6](#)

7. Proximity probes, that don't require a separate box for the driver. It sounds hard to believe, but Micro-Epsilon is the manufacturer of these units. Few people know about them yet, because the manufacturer calls them "eddy current probes".

[Datasheet #7](#)

8. We now have drop-in proximity probe replacements for a major brand. If you have headaches with prox probes, you know what I'm talking about. These are made by CTC.

[Datasheet #8](#)

9. A load cell, that can measure all 3 axes of load simultaneously. These are made by Interface, using existing strain gauging technology.

[Datasheet #9](#)

10. A pressure sensor, rated for potentially explosive environments, that can measure pressure pulsations up to 50kHz. Dytran is also the manufacturer of this unit.

[Datasheet #10](#)