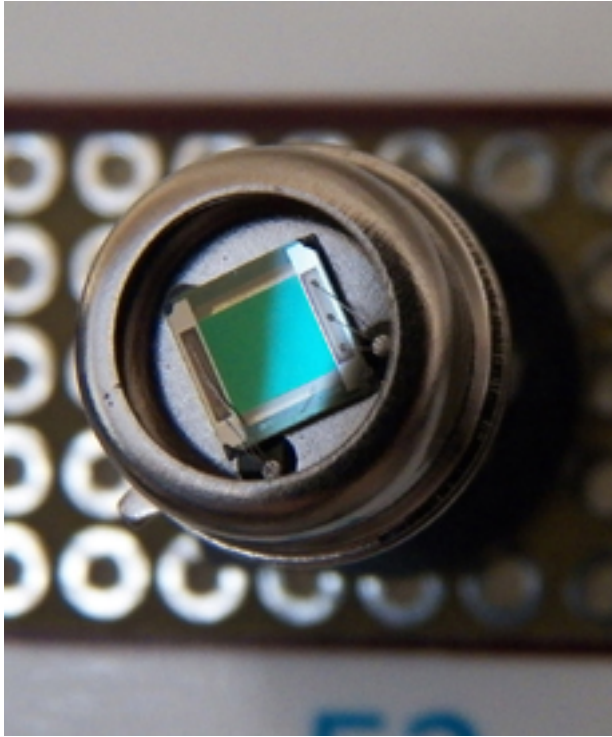


## **MEMS emitter combines high signal with fast pulses, long life**



Cal Sensors announced the global launch of a new MEMS Pulsed Emitter (MPE), a broadband source of quasi-black body pulsed light that operates over the 1 to 20 micron infrared (IR) spectrum. Designed with patented, thin-membrane, thermo-resistive material, the MPE is positioned as combining desirable quality with high signal, fast pulses and long life. With its broadband emission and low input power requirements, the MPE is suited to a wide variety of portable and traditional applications including but not limited to medical: respiratory measurements, capnography applications and glucose monitoring; environmental: greenhouse gas analysis, exhaust emissions monitoring, industrial plant leak detection; process control: protein and fat measurements, plastics sorting, moisture content analysis, contaminant detection; HVAC: demand controlled ventilation, refrigerant monitoring; and general: breath alcohol testing, gas analysis, infrared spectroscopy. The MPE promotes optimizing measurement dynamic range thanks to a combination of attributes that maximize signal output while minimizing 1/f noise. This is possible due to the emitter's high pulse speed, low thermal mass, fast response and high temperature capabilities. When paired with high performance detector technology, high measurement sensitivity and signal to noise ratio are achieved, allowing the detection of trace gases with very low parts per million. The MPE provides high pulse rates (up to 100 Hz) and modulation depth with very repeatable results.

**Cal Sensors**, [www.calsensors.com](http://www.calsensors.com) [1]

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### **Links:**

[1] <http://www.calsensors.com>