

Moisture and Gas Detection with NDIR Measurement Devices

New Filters for Pyroelectric Detectors

Pyroelectric detectors are used in gas analysis. Each gas can be detected using very specific wavelength which is the absorption wavelength.

Moisture is typically measured at the wavelengths of 1.94 μ m and 2.9 μ m however, the absorption wavelengths of CO₂ overlap the signal. In this case the moisture in the gas mixture can only be determined using complex measurement equipment. With the right narrow band filters and a suitable light source it is possible to achieve a reliable measurement with simple NDIR measurement devices.

LASER COMPONENTS brings three new filters on the market that are selected in such a way as to significantly reduce the crosstalk to other gases to achieve uncomplicated measurements with NDIR measurement devices.

For the measurement of methane (CH₄): $\lambda_{\text{CWL}} = 7.91 \mu\text{m} \pm 160 \text{ nm}$

For the measurement of alcohol mixtures: $\lambda_{\text{CWL}} = 9.50 \mu\text{m} \pm 450 \text{ nm}$

For the measurement of moisture (water vapor): $\lambda_{\text{CWL}} = 5.78 \mu\text{m} \pm 180 \text{ nm}$

More Information

<http://www.lasercomponents.com/lc/product/choice-of-filters-for-pyroelectric-detectors/>

Trade Shows

analytica, May 10-13, 2016, Messe München, **Booth A2.500**

Sensor + Test, May 10-12, 2016, Messe Nürnberg, **Hall 1, Booth 256**

LaSys, May 31-June 02, 2016, Messe Stuttgart, **Booth 4A16**

AngaCom, June 07-09, 2016, Messe Köln, **Hall 10.2, Booth J35**

Optatec, June 07-09, 2016, Messezentrum Frankfurt/Main, **Hall 3, Booth E01**

Photonex Scotland Roadshow, June 08, 2016, Heriot-Watt University UK, **Booth S22**

Sensors Expo & Conference, June 22-23, 2016, San Jose USA, **Booth 1240**

Optical Interference Coatings (OIC), June 19-24, 2016, Tuscon, AZ, USA

Sensors Expo & Conference, June 22-23, 2016, San Jose, US, USA, **Booth 1040**

Automatica, June 21-24, 2016, Messe München, **Booth B5.503**

Photon16, September 06-07, 2016, University of Leeds UK, **Booth 5**

ECOC 2016, September 19-21, 2016, Düsseldorf, **Booth 102**

Photonex Coventry 2016, October 1-13, 2016, Ricoh Arena UK, **Booth D15**

VISION 2016, November 08-10, 2016, Messe Stuttgart, **Booth 1C33**

Electronica 2016, November 08-11, 2016, Messe München, **Booth B1.306**

The Company

LASER COMPONENTS specializes in the development, manufacture, and sale of components and services in the laser and optoelectronics industry. At LASER COMPONENTS, we have been serving customers since 1982 with sales branches in five different countries. We have been producing in house since 1986 with production facilities in Germany, Canada, and the United States. In-house production makes up approximately half of our sales revenue. A family-run business, we have more than 200 employees worldwide.