Press Release

InfraTec GmbH Infrarotsensorik und Messtechnik

Dresden, 2024-03-26

Detector Configuration in Just a Few Steps

Quick and easy configuration of digital detectors with the PyrIQ® Evaluation Kit

The PyrIQ® Evaluation Kit from InfraTec supports customers in the initial testing of the digital PyrIQ® detectors without the otherwise required development of software, firmware and test circuits. The associated software allows the detector and IR source parameters to be set via an intuitive graphical user interface. Our Evaluation Kit offers an easy way to utilize the wide range of setting options for PyrIQ® detectors, speeding up the configuration and development process. In addition, the kit is also suitable for comprehending the mode of operation of an analog pyroelectric detector and the influences of its electronic components.

PyrIQ® Detectors – Digital Infrared Sensor Intelligence

The digital pyroelectric detectors of the PyrIQ® series from InfraTec open up a wide range of new possibilities for users. These detectors offer simple integration into the overall system, excellent electromagnetic compatibility and customizable signal processing. They are used for high-precision measurements in the field of gas analysis and flame sensors.

To meet complex customer needs, we offer a two-channel LID-2322 in a TO39 housing and a LRD-3824 with four channels in a TO8 design.

PyrIQ® Evaluation Kit

Our Evaluation Kit allows users to test various functions and adjustable parameters of the digital detectors quickly and easily. The sensor data is displayed live in the software interface in both the time and frequency domain. During ongoing data acquisition, it is also possible to adjust the detector parameters, resulting in an accelerated and in-depth understanding of the PyrIQ® detectors[1]. The knowledge gained from this can be used, for example, to adjust not only the feedback path of the analog front end, but also additional gain stages, bandpass filter frequencies and also the sampling frequency precisely for the specific application. The Evaluation Kit's I^2C bus allows up to three PyrIQ® detectors to be operated in parallel with full bandwidth at 1 kHz sampling frequency. In addition to the wide range of detector parameters, the Evaluation Kit offers control of the included IR radiator.

Watch this video for more interesting insights: „InfraTec Evaluation Kit Showcase“.

[1] Since users have specific requirements for detectors and the IR filters used, the detectors are configured individually and are not included in the PyrIQ® Evaluation Kit. The kit is intended to support users in the development of circuit electronics and is not intended for industrial or commercial use.

Information: 2,623 characters (incl. spaces)

About InfraTec

The InfraTec infrared sensor and measurement technology company was founded in 1991 and has its headquarters in Dresden, Germany. The privately held company employs more than 240 employees and has its own design, manufacturing and distribution capabilities.

The infrared sensor division produces custom-made components – especially pyroelectrical infrared detectors –

InfraTec GmbH
Infrarotsensorik und Messtechnik
Gostritzer Straße 61 – 63
01217 Dresden / GERMANY

Phone +49 351 82876-700
Fax +49 351 82876-543
E-mail thermo@InfraTec.de
www.InfraTec.eu

© InfraTec 03/2024
(All the stated product names and trademarks remain in property of their respective owners.)

for clients worldwide. The product range includes analogue single and multi-channel detectors as well as digital multi-channel detectors (PyrIQ). The detectors are used, for example, in gas analysis, fire and flame sensors and spectroscopy.

With its infrared measurement business unit, InfraTec is one of the leading suppliers of commercial thermal imaging technology. In addition to the high-end camera series ImageIR® and the VarioCAM® High Definition series, InfraTec offers turnkey thermographic automation solutions e. g. for industry processes, non-destructive testing and fire detection and prevention.

Contact

Company address: InfraTec GmbH
Infrarotsensorik und Messtechnik
Gostritzer Str. 61 – 63
01217 Dresden

Phone +49 351 82876-700
Fax +49 351 82876-543
E-mail sensor@InfraTec.de
Internet www.InfraTec.de

PyrIQ® Evaluation Kit with pyroelectric detector and radiator

InfraTec GmbH
Infrarotsensorik und Messtechnik
Gostritzer Straße 61 – 63
01217 Dresden / GERMANY

Phone +49 351 82876-700
Fax +49 351 82876-543
E-mail thermo@InfraTec.de
www.InfraTec.eu

© InfraTec 03/2024
(All the stated product names and trademarks remain in property of their respective owners.)