ezPyro™ TO Flame Detection Evaluation Kit

Introduction

The Broadcom® evaluation kit for ezPyro™ TO sensors is a great tool for early work with these devices. Mimicking the industry-standard 3IR flame detector configuration, this package includes all the hardware and software needed to get started with the sensors. The user software can visualize the signals, control the programmable features of the ezPyro sensor line, and take measurements. Data is captured directly from the sensors into comma-separated value (CSV) files, which are easy to load into virtually any software for custom postprocessing and analysis.

The ezPyro range of thin film digital pyroelectric sensors for flame detection combines high-quality sensors with a high level of configurable electronic integration in an industry-standard TO-39 package. High sensitivity and fast response times ensure rapid and accurate flame detection. The high dynamic range allows detection of small and large flames, nearby or over larger distances. These sensors integrate a digital, current mode readout that offers high responsivity over the full frequency range of flame flicker (3Hz to 30 Hz). Programmable gain and filtering offer maximum flexibility in system design. Industry-standard I^2C communication enables plug-and-play connectivity to microcontrollers and allows easy tuning and calibration. Broadcom sensors are very stable over time, ensuring a long and maintenance-free operational lifespan.

Features

ezPyro TO flame sensors included:

- AFBR-S6EPR44112 – 5.0 µm Long Pass
- AFBR-S6EPR44212 – 3.91 µm / 90 nm
- AFBR-S6EPR44252 – 4.48 µm / 620 nm

- ezPyro Evaluation Tool – PC software for readout and control of the included sensors
- Dimensions: 9 cm x 5 cm x 3.8 cm
- USB power and communications
- Coming soon: PC software for flame detection demonstration

Requirements

Windows PC (Windows 7 or newer)
USB A port
.NET framework

Ordering Information

Part number: AFBR-S6DPYEFL02. The kit contains the evaluation kit (as pictured above), the USB cable, and the USB memory stick.