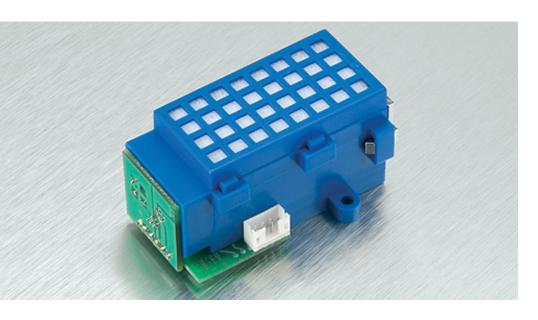
ENSOR SOLUTIONS

Smart Natural Gas Sensor

PYM 151 / PYM 152



Sensor Modules for Natural Gas Detection

PerkinElmer Optoelectronics introduces the Smart Natural Gas Sensor for natural gas detection in response to OEMs requiring highly reliable gas alarm sensors. Using non-dispersive infrared radiation (NDIR) technology and combining a robust IR source with a highly reliable pyroelectric detector, this sensor achieves long-term stability. The Smart Natural Gas Sensor is the first low-cost module on the market to meet the European EN 50 194 standard. It boasts a digital output, as well as self-monitoring and diagnostic features.

This calibrated and fully-tested unit is designed for long-term operation, for a minimum of four years.

Two versions will be available to OEMs:

The PYM 151 provides one digital series output with pre-alert, main alert, no-function and operation. The four-pin plug supplies voltage along with additional self-diagnostic access and digital output. The PYM 152 provides a sevenpin plug to offer three discrete output signals, pre-alert, main alert and no-function, in addition to the output signals of the PYM 151.

Key Features and Benefits

- Detects natural gas
- Meets EN 50 194 standard
- Non-dispersive infrared radiation (NDIR) technology
- Advanced calibrated gas sensor with integrated electronics
- Digital output
- Small size, easy to use
- RoHS compliant
- ➤ High performance and reliability for consumer households



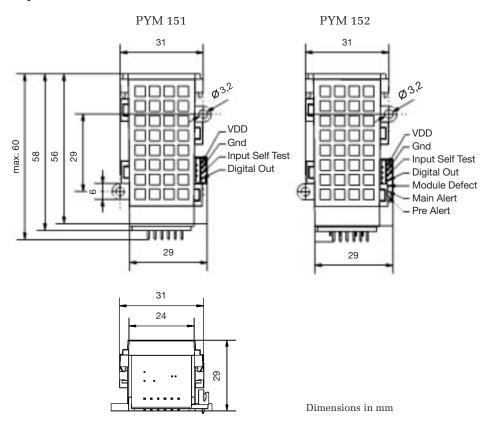
	PYM 151 / 152		Unit	Remark
Pre-Alert Level	typ.	6 %	LEL	
Main Alert Level	typ.	12 %	LEL	
Warm-Up Time	max.	120	sec	
Long Term Stability	max.	+/- 0,5 %	LEL/a	
Operation Voltage		6,0 +/- 0,1	V DC	
Operation Current	max.	240	mA	
Operation Temperature	-10 to +40		°C	
Environmental Humidity	max.	90 %	rel Hum.	
Storage Temperature	-40 to +70		°C	non permanent
	-10 to +50		°C	permanent

About the Application

The alarm levels reference lowest explosion level (LEL) values. 100% LEL is the explosive mixture of natural gas in the air. The EN standard requires an alarm guaranteed at a maximum of 20% of this value. The Smart Gas Sensor triggers well below the specified limit. All data is chosen to meet the EN standard.

Natural gas consists of methane with low concentrations of ethane, propane and butane.

Physical Dimensions



Our Sensor Solutions

PerkinElmer Optoelectronics offers a unique combination of optical sensors and technical expertise, high-volume manufacturing capabilities, and localized support worldwide to give customers the best possible solution in an efficient and cost competitive way. PerkinElmer is the market leader in airport luggage scanning X-ray detectors and remote heat detectors built into microwave ovens. Close to 100% of all street lighting in the U.S. is switched on using PerkinElmer photocells. PerkinElmer's sensor solutions include photodiodes, photodiode arrays, IREDs, phototransistors, pyroelectric detectors, thermopiles, avalanche photodiodes, pulsed laser, photocells and UV sensors. With its own wafer fabrication and specialized test equipment, PerkinElmer sells more than 150 million optical sensors each year.

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