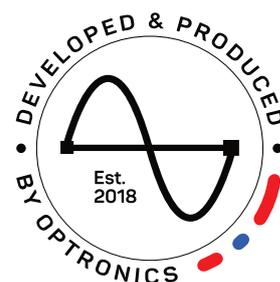


# PG11 Optical Point Detector

## Hydrocarbons



The Optronics PG11 is an explosion proof, rugged Optical Hydrocarbon Gas Detector. PG11 comes with a life-time factory calibration, is easy to install and commission and has very limited need for maintenance. The Solid State Infrared SafeSource™ ensures unmatched stability and lifetime and the built-in condition monitoring keeps maintenance and process abruptions at a minimum. Any need for attention is automatically informed to the operator.

A broad range of accessories ensure that the PG11 is ready to be used in most applications from duct mounts to extractive cabinet solutions. All accessories are easy to change should the need arise. Communication interfaces and fieldbuses are available using the OptoCom™ module.

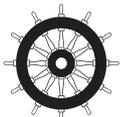
The PG11 is designed for use in SIL2/SC3 systems and to withstand ambient conditions such as extreme temperatures and vibrations, all to ensure "Detection for real safety - for real life"

### Features

- Solid State Infrared SafeSource™
- Life-time factory calibration
- Fast response time (T90 < 1.5 s)
- OptoBAS™ for increased signal baseline accuracy
- Designed for SIL2/SC3
- HART7 interface
- Heated sapphire optics
- Multicolor indicator
- Extended input voltage range

### Benefits

- 6 years warranty
- 15 years warranty on SafeSource™
- Class leading PFD with proof test intervals up to 5 years
- No field calibration
- OptoCom™ for system integration
- Visual Indicator for local alarms
- One detector - several applications



# Specifications

## Technology

Solid-state Infrared SafeSource™.  
Temperature compensated for rugged applications

## Gases and measuring ranges

Methane 0 - 100 %LEL, 0 - 100 %Vol  
Propane 0 - 100 %LEL  
Other gases on request

## Calibration

Calibrated at factory, no need for field calibration.

## Self-test

Continuous health check of all important HW and SW functions

## Performance

Accuracy ± 3%FS  
Repeatability ± 1%FS  
Response time T90 = 1.5 sec

## Signal output

Current source or sink 4 - 20 mA. Warnings/faults signalled below 4 mA.  
OptoCom™ for application specific digital protocols.  
HART® for maintenance and configuration.

## Ambient conditions

Temperature	Storage	-60 to +75°C / -76 to +167°F
	Operating	-40 to +75°C / -40 to +149°F
Humidity		0 - 100 %RH
Vibration		Resistant to shock and vibration up to 4G

## Housing

Ingress Protection	IP66/IP67, Type 4X
Housing material	Stainless steel 316L
Weight	Less than 4 kg
Dimensions	See below

## Electrical requirements and characteristics

Field wiring terminals	Stranded or solid wires rated up to 2.5 mm <sup>2</sup>
Cable gland entry options	Two M20 entries as standard. M25, ½"NPT and ¾"NPT on request
Power requirements	18 - 50 VDC (18-35 VDC for cFMus)
Power consumption	< 3.5W average Soft boot with max 1 A current spikes

## Approvals

ATEX/IECEX/INMETRO	Ex db eb IIC T5 Gb Ex db IIC T5 Gb
EAC EX	1Ex db e IIC T5 Gb X
cFMus	Class I Division 1, Groups B, C & D
Marine	MED, BV, LR, DnV GL, ABS, Class NK
Performance	IEC 60079-29-1
Safety Integrity(IEC61508)	SIL2/SC3 (SIL3 in 1oo2 redundancy)

## Additional Accessories

Sunshade	Maintenance kit
Environmental cap	Maintenance Blocking kit
Universal Mount kit	Gas Test Nozzle
Pole mount kit	OptoCom™

For more information contact your local supplier.

# Accessories

## Mosquito Net

Insect guard with integrated gas nozzle. No need to remove the guard to perform routine testing.



## Gas Test kit

Gas test kit for field testing. Separate inlet and outlet so test gas can be ventilated to safe area if needed.



## Gas Sampling kit

Snap-in gas sampling kit for extractive solutions. Simple mounting and dismounting for easy access to optical parts. The small volume ensures unmatched fast response of the sampling loop.



## Gas Free Bump Test kit

Gas free test kit for safe and easy function and bump testing of detector.



## Duct Flange kit

Contact your local dealer for alternatives. Available for most standard JIS, ISO and ANSI flanges.



## Remote Gas Test kit

Remote gas test interface for installations where the detector is out of reach.

