

# AUTROPOINT MARITIME GAS DETECTOR POWER LOOP

## Infrared Hydrocarbon Gas Detector Product datasheet

### Features

- Superior optics protection system.
- No undisclosed failure modes.
- Routine calibration not required.
- Explosion-proof, stainless steel housing with tethered weather protection baffle.
- Integral wiring compartment eliminates need for external junction boxes.
- Built-in tri-color LED eliminates need for external display module.
- Heated sapphire optics deliver long-lasting, high performance detection capability.
- Immune to damage from exposure to constant background gases or to high gas concentrations.
- FM, DNV/MED, DEMKO and CE (including ATEX 94/9/EC) certifications.
- Certified to FM Div. 1 and DEMKO Ex d, e protection standards for maximum versatility.
- Gas performance verification by FM/DEMKO.
- Factory set and calibrated to methane, propane, ethylene, or butane.

### Application/Description

The AutoPoint Maritime gas detector is a diffusion-based, infrared combustible gas detector that provides continuous, fixed monitoring of flammable hydrocarbon gases from 0 to 100% Lower Flammable Limit (LFL).

A key feature of the AutoPoint Maritime gas detector is the built-in PowerLoop system technology, enabling the detector to communicate with AutoSafe Maritime gas panel on a single pair of wires.

This compatibility, called the PowerLoop technology, is a two-wire power and signalling bus connected in a ring topology and galvanically isolated from the rest of the system, saving cable cost and weight. Each detector has a built-in short-circuit isolator, hence no detectors will be lost because of a single break or short-circuit in the PowerLoop lines.



All alarms and faults are signalled via the PowerLoop. The detector does not require any local power supply.

Ideally suited for protection of challenging maritime facilities, the AutoPoint Maritime gas detector is globally certified for use in Class I, Divisions 1 and 2, and Zones 1 and 2 hazardous areas. In addition, the stainless steel construction, sapphire optics, and modular design all combine to deliver industrial grade hardness along with easy installation and the lowest cost of ownership available.

The AutoPoint Maritime gas detector is capable of detecting hundreds of flammable hydrocarbon gases and vapors. The detector is performance certified to methane, propane, ethylene, and butane, and is shipped from the factory set and calibrated to one of these gases.



## Specifications

<b>Input Voltage</b>	Powered from AutoSafe Maritime gas panel		
<b>Power Consumption</b>	7 watts maximum		
<b>Warmup Time</b>	Two minutes from cold power-up to normal mode; 1 hour minimum recommended.		
<b>Temperature Range</b>	Operating: -40°C to +75°C (-40°F to +167°F). Storage: -55°C to +85°C (-67°F to +185°F).		
<b>Humidity</b>	0 to 99% R.H. (Company verified). 5 to 95% R.H. (FM/CSA/DEMKO verified).		
<b>Detection Range</b>	0 to 100% LFL standard. Other ranges are configurable.		
<b>Detectable Gases</b>	Most flammable hydrocarbon vapors are detectable. The detector is performance certified to methane, propane, ethylene, and butane, and is shipped from the factory set and calibrated to one of these gases.		
<b>Device Configuration</b>	Configuration parameters include tag number, measurement range, signal processing algorithm, alarm levels, and other selectable parameters.		
<b>Response Time in Sec. (With Methane Applied and Baffle Installed)</b>		T50	T60 T90
	With Hydrophobic Filter:	4.8	5.1 7.6
	Testing based on EN 60079-29-1.		
	See manual HC300PL/IGB for other gases and other performance standards.		
<b>Alarm Setpoint Range</b>	Low Alarm: 5 to 60% LFL High Alarm: 5 to 60% LFL.		
<b>Accuracy</b>	±3% from 0 to 50% LFL, ±5% from 51 to 100% LFL.		
<b>Self-Diagnostic Test</b>	All critical tests performed once per second.		
<b>Detector Housing Material</b>	316 stainless steel (CF8M).		
<b>Conduit Entry Options</b>	Two entries 25 mm.		
<b>Wiring Terminals</b>	Field wiring screw terminals are UL/CSA rated for up to 14 AWG wire, and are DIN/VDE rated for 2.5 mm <sup>2</sup> wire.		
<b>Shipping Weight (Approximate)</b>	11.5 pounds (5.2 kg).		
<b>Dimensions</b>	L = 236 mm, W = 132 mm, H = 117 mm		

## Certifications

<b>CE:</b>	Conforms to: Low Voltage Directive: 2014/35/EU EMC Directive: 2014/30/EU ATEX Directive: 2014/34/EU
<b>IEC:</b>	IECEX ULD 04.0002X Ex de IIC T4-T5 Gb -- OR -- Ex de [ib] IIC T4-T5 Gb (with HART communication port) T5 (Tamb -50°C to +40°C) T4 (Tamb -50°C to +75°C)
<b>ATEX:</b>	CE 0539 II 2 G Ex de IIC T4-T5 Gb DEMKO 01 ATEX 129485X. (Performance certified to Methane, Propane, Ethylene, & Butane in accordance with EN 60079-29-1.) T5 (Tamb -50°C to +40°C) T4 (Tamb -50°C to +75°C) IP66/IP67.
<b>DNV:</b>	Certificate No. A-13175
<b>MED:</b>	Certificate No. MED-B-5866 Certificate No. MED-D-1508

## Part numbers

116-010195-056	Maritime Gas Detector, PowerLoop, w/ Hydr.filter and Weather baffle
116-010195-057	Maritime Gas Detector , PowerLoop