

G6111

PAH Sensor

The next generation of PAH monitoring
– robust and reliable

Designed for marine application

Green Instruments is pleased to introduce the newly-developed PAH sensor to the market. Based on more than 20 years of experience in monitoring and protection on the maritime market, Green Instruments has developed a PAH sensor that is robust, reliable, and fit for the marine environment.

The PAH sensor is specially designed for phenanthrene monitoring for exhaust gas cleaning systems. It is designed as a plug-and-play solution with internally saved factory calibration values, which allows easy integration into existing Green Instruments systems. The sensor is marine type approved and fully compliant with MEPC. 259(68) and MEPC. 340(77).

Improved quality

The high quality of the sensor ensures a longer lifetime. The newly-developed PAH sensor is produced using anti-corrosive material, making the sensor ideal for use in marine applications. The PAH sensor uses the latest LED technology, ending the era of outdated Xenon light sources.

3-year certification

Prior to delivery, a full factory calibration is carried out by

Green Instruments to ensure compliance with the requirements of regulatory agencies. A sensor certificate is issued accordingly covering a period of 3 years of operation or 4 years from factory calibration date, whichever comes first. This provides the client with 1 year of shelf life. Green Instruments provides 3-year warranty on the sensor.

Simple operation

The PAH sensor is simple to operate and requires minimal maintenance - only occasional wiping using a cloth. The sensor can be verified and/or calibrated on-site using certified calibration solutions following ISO 17025. Validation must be done every 6 months, and calibration is to take place if the sensor is out of tolerance. The sensor requires no additional factory calibration during sensor lifetime.

Service and support

The G6111 PAH sensor is simple to install and has a low cost of ownership due to its 3-year certificate lifetime and unnecessary factory calibration. Should assistance be needed, Green Instruments provides full service and support to ensure optimal installation and operation throughout the entire product lifetime.



Key features

- Designed and certified for the harsh marine environment
- MEPC. 259(68) and MEPC. 340(77) compliant
- Simple installation
- Improved quality
 - non-corrosive materials
- Optimized measuring technology
- 3-year certificate lifetime
- 3-year warranty
- Simple operation
- On-site validation and calibration
- No factory calibration during sensor lifetime
- Global service and support

Specifications – G6111

PAH MODULE – TYPE G6111

Legislation

Compliance towards MEPC. 259(68) and MEPC. 340(77) has been demonstrated under the surveillance of various class societies

Lifetime

A sensor certificate is issued accordingly covering a period of 26.280 (equivalent of 3 years) of operation or 4 years from factory calibration date, whichever comes first. This provides the client with 1 year of shelf life

Measurement

Measurement technology The technique used is UV induced fluorescence with the capability of detecting PAH concentration in µg/l (ppb).

Excitation wavelength: 254 ± 10 nm

Detection wavelength: 360 ± 50 nm

The PAH measurement is compensated for the effects of turbidity by means of a turbidity compensation formula and input from the turbidity sensor module G6120

Measurement range **Low range:**
0 – 100 µg/l phenanthrene equivalence

High range:
0 – 800 µg/l phenanthrene equivalence

Dual range:
0 – 100 / 800 µg/l phenanthrene equivalence

(To be specified upon request)

Accuracy Max ± 5 % of sensor range

Max ± 5 % of the nominal standard test concentration, which value is not less than 80 % of the sensor range

Communication

Output signal RS-232
Analog 4 – 20 mA

Sample limits wetted materials

2 – 11 pH

Material/enclosure

Wetted materials PVC, fused silica glass, AISI 316, and NBR

Dimensions/weight

Dimensions 187 x 99 mm

Weight 1 kg

Specifications subject to changes without notice

CERTIFICATES



EUROPE

Green Instruments A/S

Erhvervsparken 29
9700 Brønderslev, Denmark
Tel: +45 96 45 45 00

sales@greeninstruments.com

AMERICA

Green Instruments USA, Inc.

6750 N. Andrews Avenue Suit 200
Fort Lauderdale, FL-33309, USA
Tel: +1 954 613 0400

usa@greeninstruments.com

ASIA

Green Instruments (S) Pte. Ltd.

4008 Ang Mo Kio Avenue 10
#01-09/10 Techplace I, Singapore 569625
Tel: +65 3100 0577

sales.sg@greeninstruments.com



For more information, please visit us at www.greeninstruments.com.