

# GPS 107 15ppm Bilge Alarm

Customer inspired innovation

The GPS107 uses technologies such as fluorescence spectrometry and ultrasonic cleaning to provide accurate oil content in water readings with no interference from chemicals/rust etc, and no manual intervention for daily cleaning of the optical window. These features also permit long service (4 years) and re-calibration (2 years) intervals.



## Features

- **RapidWave**<sup>TM</sup> ultrasonic Cleaning
- Fluorescence Spectrometry
- DeepUV Fluorescence
- Optimised Design
- High Memory Capacity
- LED output control

## Benefits

- Eliminates regular maintenance for cleaning
- Eliminates false positive readings
- Captures low fluorescent oil types
- Reduces service interval to 4 years
- Stores ppm and other important data for 10 years
- Reduces re-calibration interval to 2 years



# Technical Specifications

## OPERATING LIMITS:

|                     |                             |
|---------------------|-----------------------------|
| Ambient temperature | Min -20 deg C, Max 55 deg C |
| Sample temperature  | Min 0 deg C, Max 80 deg C   |
| Operating pressure  | 0 to 7 bar                  |
| Flow velocity       | 0.5 to 10 m/s               |

## MECHANICAL:

|                      |                      |
|----------------------|----------------------|
| Dimensions           | 380x383x142mm(HxWxD) |
| Weight               | 13.5kg               |
| Sample connections   | 1/4" NPT             |
| Wetted parts         | SS316/316L           |
| Enclosure            | SS316/316L           |
| Enclosure protection | IP66, NEMA 4X        |

## INPUT SIGNALS:

|                  |                                          |
|------------------|------------------------------------------|
| Separator Status | 0-5VDC signal, normally 1mA, maximum 5mA |
| Flow status      | 0-5VDC signal, normally 1mA, maximum 5mA |

## OUTPUT SIGNALS:

|                                               |
|-----------------------------------------------|
| 3 x relay contacts, 5A @ 250VAC or 2A @ 28VDC |
| 1 x 4-20mA                                    |

## ELECTRICAL:

|                            |                      |
|----------------------------|----------------------|
| Standard power requirement | 110/220VAC           |
| Consumption 110/230VAC     | 15W nominal 84W peak |

## MEASUREMENT:

|                       |                           |
|-----------------------|---------------------------|
| Light source          | Deep UV LED               |
| Measurement principle | Fluorescence Spectrometry |
| Range                 | 0-100 ppm                 |
| Accuracy              | +/- 1%                    |
| Repeatability         | +/- 1%                    |
| Sample rate           | once every 5 seconds      |

## COMPLIANCE

|                          |                       |
|--------------------------|-----------------------|
| 2014/22/EC               | Measuring instruments |
| 2014/30/EU EMC Directive | EMC Directive         |
| IMO MEPC 107 (49)        | by DNV and USCG       |
| DNVGL-CP-0485            | by DNV                |
| ISO9001:2015             |                       |

