

# PELANGI

## FOG DETECTOR

## FD7100

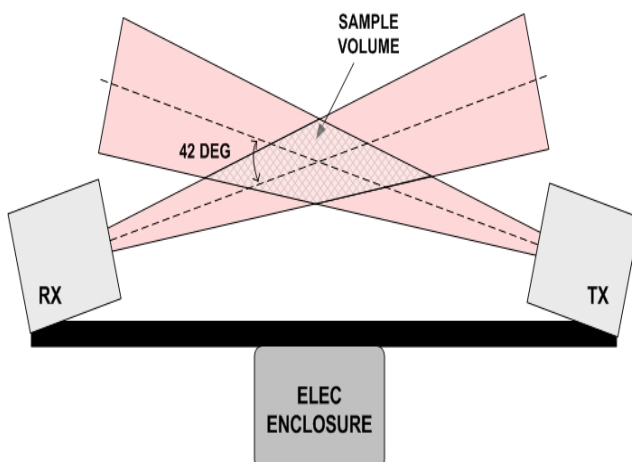
The **FD7100** is a compact fog detector designed for littoral or offshore marine applications.



The complete FD7100 Fog Detector

### Method of operation:

- LED transmitter projects light in a forward direction into the air between the heads and the light scattered is collected by the receiver on the opposite head. The resulting signal strength is converted to a visibility range.
- The 42° scattering angle ensures accurate performance over a wide range of particle types, including fog, rain, snow, and haze.



FD7100 uses well-proven forward scattering physics.

### FD7100 Features:

- Comprising a single unit, and weighing only 8 Kgs the standard FD7100 is easily pole-mounted on lighthouse parapets or mooring buoys.
- Analogue output alarm thresholds can be pre-set to any visibility range between 30m and 16km, giving the ability to trigger a fog signal, e.g. a 2 mile fog signal could be set to operate when the visible range drops below 1 mile. Analogue outputs can also be incorporated into our Pelanet remote monitoring system.
- Low power consumption of 8 watts at 12 volts D.C. when powered up.
- Surge and EMI protection.
- The FD7100Ex version can be supplied for use Zone 1 classified hazardous areas. The FD7100Ex utilises standard components housed in ATEX certified enclosures. This version can be supplied for applications where it is not possible to mount the standard detector in a non-hazardous area.
- When combined with our FS Series Fog Signals, The FD7100 or FD7100Ex form a complete automated fog signalling system.



Fitting of scatter plate during calibration procedure

# PELANGI

---

## FOG DETECTOR

---

## FD7100

---

### FD7100: Specification

Weight: 8 kgs  
Dimensions: 900(L) x 230(W) x 340(D) mm.  
Mounting: Supplied ready to mount onto 40mm diameter pipe.  
Protection: UV resistant GRP and anodised aluminium enclosure, rated to IP66.  
Humidity: 0-100%  
Temperature: -40°C to 60°C

### FD7100Ex: Specification

Hazardous area type: Zone 1  
Inspecting Authority: CESI  
Classification: Ex II 2 GD EEx d IIB T5/T6  
Certificate numbers:  
**CESI ATEX 036 & CESI ATEX 027**

Ingress Protection: IP65  
Mounting: Supplied ready to mount onto 122mm OD and 5mm wall thickness pipe.  
Protection: UV resistant GRP and anodised aluminium enclosure, rated to IP66.  
Humidity: 0-100%  
Temperature: -40°C to 60°C  
Weight: 35 kgs

### Detector options:

- Output control PCB board with any of the following options:
  - 4-20mA
  - 4-20mA
  - Control Relay
  - Diagnostic Relay
- Microprocessor PCB board with RS232 output available.
- 10-36V volt D.C. or 100-240 volt A.C. input options can be selected at time or order.
- Hood Mounted heaters available for Low temperature “icing” locations.
- Calibration Kit in carry case available as an optional extra.



**The FD7100Ex Fog Detector. Suitable for Zone 1 applications.**



**INDUSTRIAL MEMBER  
INTERNATIONAL  
ASSOCIATION OF  
LIGHTHOUSE  
AUTHORITIES**