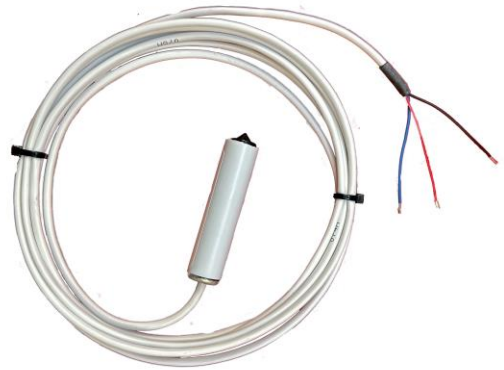


## Bunded Tank Oil Leak Alarm Type: ODT2-1



This unit has been designed to look for oil leaks between the inner and outer tanks on bunded oil tanks. The alarm status, normal or leak is displayed on the alpha numeric display. When oil touches the sensor, the display will flash showing “Bund Tank Alarm”, an internal audible warning will sound, the common alarm volt free contacts will change state and if fitted the following with activate; Remote beacon/beacon sounder, and/or the SMS text messaging unit which will send an alarm message via the mobile network. If power to the unit fails, the internal volt free “Common Alarm” BMS contact will change state. If required and upon request, the unit can be fitted with a second sensor to give a high, high alarm.

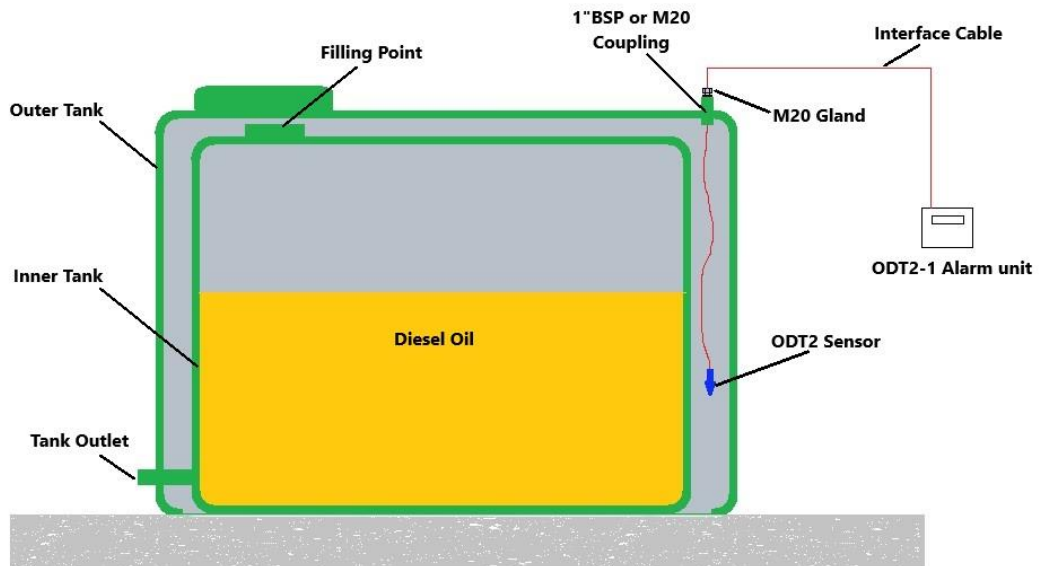
### Standard Features

- \* The unit can be supplied as a 1 or 2 Alarm system
- \* Oil sensors can be up to 100m away from the main alarm unit
- \* Large back lit alpha numeric display
- \* Except for mains power, all terminals are of the plug and socket type
- \* On board audible warning device to alert local operators of a problem
- \* Alarms latched until Mute operated to give indication of oil leak
- \* Two common alarm relay contact for onward signalling to a BMS or other systems
- \* Mains Power monitoring via the common alarm BMS contact

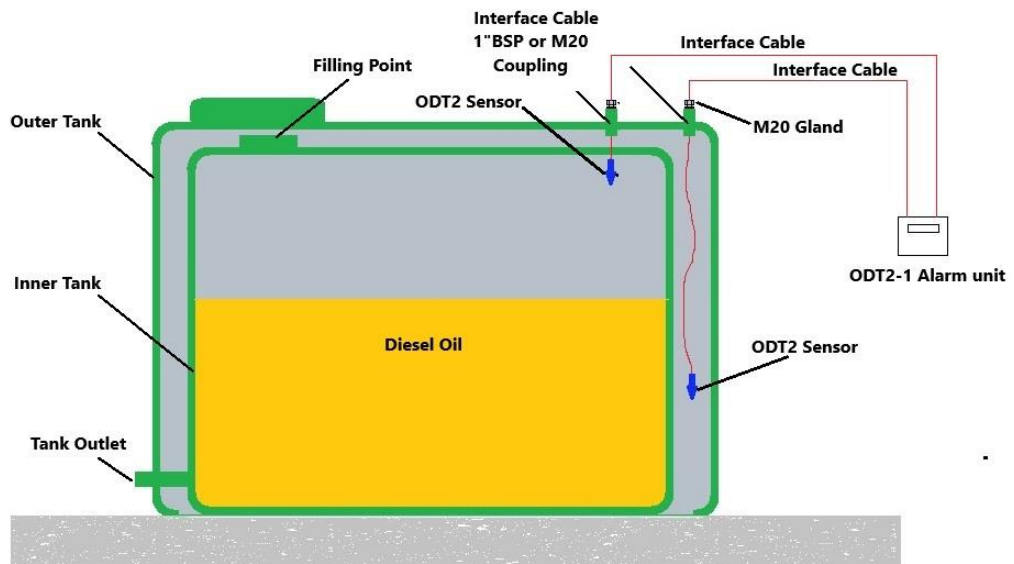
### Optional Equipment

- \* Individual zone alarm relay contacts for onward signal to a BMS
- \* Common alarm output to a flashing Beacon
- \* Common alarm output to a flashing Beacon and Mutable Sounder
- \* SMS text messaging or Email

**Figure 1:** Diagram showing an ODT2-1 single zone panel for Bunded Oil Leak Alarm.



**Figure 2:** Diagram showing an ODT2-1 two zone panel for both a Bunded Oil Leak Alarm and a High High Level Alarm.



## **Sensor**

The mode of operation is the principle of total internal reflection. An LED and photo-transistor are housed in a plastic (Polysulfone) dome. When no oil is present, light from the LED is internally reflected from the dome to the photo-transistor. When oil covers the dome, the effective refractive index at the dome-oil boundary changes allowing some light from the LED to escape. Thus, the amount of light received by the photo-transistor is reduced indicating the presents of oil.

## **Specification**

Housing type	ABS Plastic
Colour	Light Grey
Size	180mm wide x 130mm high x 60mm deep
Mounting	Wall
Cable access	Bottom/back
Maximum sensors per zone	2
Maximum distance to sensor	100 metres
Sensor size	15mm diameter x 95mm long
Sensor cabling	0.22mm 3 core
Sound Output	80db at 1 metre
Burden	<3VA
Input Voltage	96- 265VAC 50/60 Hz
Alarm unit temperature range	-20 to + 70°C
Common alarm contact	DPCO 1A @ 230VAC volt free contacts
Alarm unit IP Rating	IP50
Sensor IP rating	IP65
<b><i>Optional</i></b> Beacon	IP67 high intensity Red Flashing LED
<b><i>Optional</i></b> Sounder	IP67 110db at 1 metre
<b><i>Optional</i></b> SMS text	Up to 50 numbers or email addresses using mobile network

Continual development may result in products and specifications being changed without prior notice