



LIQUID LEAK DETECTION SYSTEMS

OIL & GAS DIVISION

# FG-ALS4-OD

## Four Zones Alarm & Locating System Unit for Hydrocarbon Leak Detection

### Product Datasheet



- ▶ Locating Leak Detection System
- ▶ 4 Independent Zones
- ▶ 4 Simultaneous Leaks can be Detected
- ▶ Touch Screen Display
- ▶ MODBUS/JBUS Integration
- ▶ Exclusive for FG-OD Range Products

## Description

The FG-ALS4-OD, Four Zones Alarm & Locating System Unit is designed to be used with FG-OD hydrocarbon range of products, to give instant detection and location of liquid (non-conductive hydrocarbon liquids and solvent).

In the event of liquid leak or default on the sense cables for each zone, the responses from the FG-ALS4-OD alarm & locating unit:

- An audible alarm is triggered and a relay is activated.
- The touch screen of the panel displays the zone, the location of the leak (on the cable) and details of the fault (the type of fault leak or cable break).
- Report to the DCS/SCADA/Safeguarding system via a JBUS/MODBUS protocol.

To mute the alarm sound, simply touch the screen, or the panel will mute the alarm sound automatically when the leak or break is cleared.

## Features & Benefits

### FEATURES

- The FG-ALS4-OD unit is dedicated to the FG-OD range products including sense cables and point sensors.
- The FG-ALS4-OD unit can control up to 4 FG-OD sensing elements: sense cables or point sensors.
- 3.2" touch-screen gives a clear indication of the system status.
- User-friendly system - users can customise the system with the sub menus accessible from the home screen, to set up the unit.
- 4 detection zones are available on one unit.
- 5 relays are available, 4 for leak and 1 for system fault.
- RS485 serial link with MODBUS/JBUS communication protocol for interfacing with BMS is available.

### BENEFITS

- Locate leaks on the section.
- Detect cable-break fault.
- The FG-ALS4-OD unit is accurate and easy to use in Oil & Gas and Chemical Industries.

## Technical Data

<b>Compatibility</b>	FG-OD, FG-ODC, FG-ODR range of hydrocarbon sense cables Point detector: FG-ODP
<b>Enclosure Type</b>	ABS flame retardant UL94V0
<b>Operating Temperature</b>	23° to 131°F [-5° to 55°C]
<b>Serial Interface Physical Support</b>	Optoisolated two wire RS485
<b>Serial Link Parameters</b>	9600 baud, 8 data bits, 1 stop, no parity
<b>Supported Protocol</b>	MODBUS, function 3
<b>Relays Type: Leak + Cable Break</b>	5 SPDT single contact NO-NC
<b>Relay Max. Switching Voltage</b>	125VAC and 220VDC
<b>Relay Max. Switching Capacity</b>	60W (30V x 2A)
<b>Power Consumption</b>	5 VA
<b>Supply Current (typ.)</b>	0.25A/115VAC 0.15A/230VAC
<b>Dimensions (W,H,D)</b>	6.61"W x 6.02"H x 2.2"D (168mmW x 153mmH x 56 mmD)
<b>Ingress Protection (IP)</b>	IP40

# Screen Shots

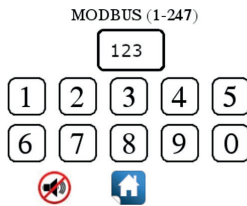
- The first button (flag) allows to change the system language: English / French / German



- The second button (arrows) allows to show the installed lengths on each of the four cables:

ZONE 1 3 m	ZONE 2 12 m
ZONE 3 7 m	ZONE 4 3 m

- The third button (gears) allows to change the Modbus slave number and to set the «mute» mode:



- In the case of faults (leak or cablebreak), the touch screen shows below: The leak alarms, represented by a drop of liquid; The cablebreak alarms, represented by scissors and the "sensor" label.

ZONE 1 END	ZONE 2 OK
ZONE 3 LEAK	ZONE 4 BUS

# Electrical Specification

<b>Power Supply 100-240VAC</b>	N : Neutral / L : Line /  : Earth
<b>RS485</b>	R1 : COM / R2 : RT+ / R3 : RT-
<b>Cable Break Relay</b>	R1 : NO / R2 : COM / R3 : NC
<b>Leak Relay</b>	R1 : NO / R2 : COM / R3 : NC
<b>FG-CLOD Leader Cable</b>	B : White wire / C : Black wire / D : Red wire

# Identification Codes

<b>FG-ALS4-OD F</b>	Analog Touchscreen Panel 4 Zones (Wall mounted) 100-240VAC - Oil Detection Sensors
<b>FG-OD20, FG-OD12, FG-OD7, FG-OD3</b>	Addressable Oil Sensing Cable in 65, 39, 22, 9 ft (20, 12, 7, 3 m) with Connectors
<b>Accessories:</b>	
<b>FG-CLOD</b>	Leader Cable, on 'OD Bus 8771'
<b>FG-TMOD</b>	Digital End Plug on 'OD Bus 8771' for FG-OD Cable
<b>FG-NOD N</b>	'OD Bus 8771' Neutral Cable 'N' (98, 49, 22, 9 ft) (30, 15, 7, 3, 1m) With Connectors
<b>CF-OD50</b>	50 Hold-down Clips with Adhesive for Oil Cables
<b>ES-OD</b>	40 Tags for Oil Cable

# Certificates



FG-OD sense cables which are certified by ATEX can be connected to the FG-ALS4-OD alarm & location unit.

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- TTK Headquarters** / 19 rue du Général Foy / 75008 Paris / France / T : +33.1.56.76.90.10 / F : +33.1.55.90.62.15 / [www.ttk.fr](http://www.ttk.fr) / [ventes@ttk.fr](mailto:ventes@ttk.fr)
- TTK Oil & Gas Division** / 19 rue du Général Foy / 75008 Paris / France / T : +33.1.56.76.90.10 / F : +33.1.55.90.62.15 / [www.ttk.fr](http://www.ttk.fr) / [rrisi@ttk.fr](mailto:rrisi@ttk.fr)
- TTK UK Ltd.** / 3 Luke Street / London EC2A 4PX / United Kingdom / T : 0207 729 6002 / F : 0207 729 6003 / [www.ttkuk.com](http://www.ttkuk.com) / [sales@ttkuk.com](mailto:sales@ttkuk.com)
- TTK Pte Ltd.** / #09-05, Shenton House, 3 Shenton Way / Singapore 068805 / Tel.+65-6220.2068 / Mob: +65.9271.6191 / Fax: +65-6220.2026 / [www.ttk.sg](http://www.ttk.sg) / [sales@ttk.sg](mailto:sales@ttk.sg)
- TTK Asia Ltd.** / 2107-2108 Kai Tak Commercial Building / 317 Des Voeux Road Central / Hongkong / Tel.+852.2858.7128 / Fax.+852.2858.8428 / [www.ttkasia.com](http://www.ttkasia.com) / [info@ttkasia.com](mailto:info@ttkasia.com)
- TTK Middle East FZCO** / Building 6EA, Office 510 PO Box 54925 / Dubai Airport Free Zone / UAE / T: +971 4 70 17 553 / M: +971 50 259 66 29 / [www.ttkuk.com](http://www.ttkuk.com) / [cgalmiche@ttk.fr](mailto:cgalmiche@ttk.fr)
- TTK Deutschland GmbH** / Berner Strasse 34 / 60437 Frankfurt / Deutschland / T : +49(0)69-95005630 / F : +49(0)69-95005640 / [www.ttk-gmbh.de](http://www.ttk-gmbh.de) / [vertrieb@ttk-gmbh.de](mailto:vertrieb@ttk-gmbh.de)
- TTK North America Inc** / 1730 St. Laurent Boulevard, Suite 800 / Ottawa, ON K1G 5L1 / Canada / T : +1 613 566 5968 / [www.ttkcanada.com](http://www.ttkcanada.com) / [info@ttkcanada.com](mailto:info@ttkcanada.com)