



LIQUID LEAK DETECTION SYSTEMS

FG-ALS4

Four Zones Alarm & Locating System Unit

Product Datasheet



- ▶ Locating Leak Detection System
- ▶ 4 Independent Zones
- ▶ 4 Simultaneous Leaks can be Detected
- ▶ Touch Screen Display
- ▶ MODBUS/JBUS Integration
- ▶ Adjustable Sensitivity

Description

The FG-ALS4, Four Zones Alarm & Locating Unit is designed to be used with TTK analog sense cables: FG-ECS, FG-ACS and FG-ECX, FG-ACX to give instant detection of liquid leaks (water, acid or base).

In the event of liquid leak or fault on the sense cables in any zone, the FG-ALS4 will respond as follows:

- An audible alarm is triggered and a relay is activated.
- The touch screen of the panel displays the zone, the location of the leak (to the nearest 1 metre) and details of the fault (the type of fault leak or cable break).
- Event report is sent to the BMS via MODBUS /JBUS.

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

- Available in both wall mounted and rack mounted (19" and 3U).
- The FG-ALS4 unit can control up to 45 metres of sense cable per zone.
- 3.2" touch-screen gives a clear indication of the system status.
- 4 detection zones are available.
- 5 relays are available, 4 for leak and 1 for cable break (all zone)+power failure.
- RS485 serial link with MODBUS/JBUS communication protocol for interfacing with BMS is available.

BENEFITS

- Accurate reporting of leak location to one metre.
- Detects cable break faults.
- The sensitivity of the unit is adjustable via the potentiometer on the PCB.
- Compatible with existing monitoring systems.
- User-friendly system - users can customise the system with the sub menus accessible from the home screen, to set up the unit.
- The FG-ALS4 unit is accurate and easy to use, ideal for small and medium applications where accurate leak location is required.

Technical Data

Compatibility	Analog sense cables: FG-ECS, FG-ECX, FG-ACS, FG-ACX
Enclosure Type	ABS flame retardant UL94V0
Operating Temperature	-5°C to 55°C
Serial Interface Physical Support	Optoisolated two wire RS485
Serial Link Parameters	9600 baud, 8 data bits, 1 stop, no parity
Supported Protocol	MODBUS, function 3
Relays Type: Leak + Cable Break	5 SPDT single contact NO-NC
Relay Max. Switching Voltage	125VAC and 220VDC
Relay Max. Switching Capacity	60W (30V x 2A)
Supply Current (typ.)	0.25A/115VAC 0.15A/230VAC
Supply Voltage	100-240 VAC, 50/60Hz
Dimensions (W,H,D)	Wall mounted: 168 x 153 x 56 mm; Rack mounted: 482.60 x 132.56 mm
Ingress Protection (IP)	IP40

Screen Shots

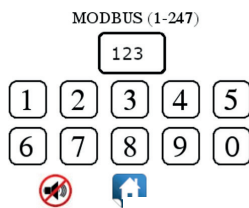
- The first button (flag) allows to change the system language: English / French / German



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

ZONE 1 20 m	ZONE 2 5 m
ZONE 3 45 m	ZONE 4 15 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 LEAK SENSOR	ZONE 2 OK
ZONE 3 CABLEBREAK 16m	ZONE 4 LEAK SENSOR

Electrical Specification

Power Supply	N : Neutral / L : Line / \perp : Earth
RS485	R1 : Gnd / R2 : RT+ / R3 : RT-
Cable Break Relay	R1 : NO / R2 : COM / R3 : NC
Leak Relay	R1 : NO / R2 : COM / R3 : NC
FG-CLC Leader Cable	A : Green wire / B : White wire / C : Black wire / D : Red wire

Identification Codes

FG-ALS4 F	Four zones alarm & location system unit - wall mounted
FG-ALS4 E	Four zones alarm & location system unit - rack mounted (19", 3U)
FG-ECS, FG-ACS and FG-ECX, FG-ACX	Water or acids sense cable in 3m, 7m, and 15m in length
Accessories:	
FG-CLC	Leader cable of 3.5 metres length
FG-TMX	End termination plug
CF-EC100	100 hold-down clips with glue
ES-EC	40 tags

Certificates



The FG-ALS4 unit meets the requirements of all European Standards in EN 50081 and EN 50082 EMC.
FG-ALS4 meets the TÜV requirements, according to IEC 61010-1/A2.

All the connections in the FG-ALS4 alarm locating system unit must be done with the power supply switched off.
Read carefully the installation procedure for the FG-ALS4 alarm locating system unit.

This brochure has been carefully prepared to ensure technical accuracy but is only intended for promotional use. TTK UK cannot guarantee that the information contained herein contains no errors or omissions, and hence does not accept responsibility related to the use of its equipment. TTK maintain its obligations set forth in the Standard Terms and Conditions of Sale and will not, under any circumstances, assume liability for any incidental damages, indirect or consequential, arising from the sale, resale, use or misuse of this project. The purchaser(s) accept their responsibility as the sole judge(s) of the adaptability of the product for the intended use.
FG-SYS and TOPSurveillance are trademarks of TTK S.A.S. © TTK 2024

- **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 / ventes@ttk.fr
- **TTK UK Ltd.** / 3 Luke Street / London EC2A 4PX / United Kingdom / T : +44 207 729 6002 / F : +44 207 729 6003 / www.ttkuk.com / sales@ttkuk.com
- **TTK Pte Ltd.** / #09-05, Shenton House, 3 Shenton Way / Singapore 068805 / T: +65.6220.2068 / M: +65.9271.6191 / F: +65-6220.2026 / www.ttk.sg / sales@ttk.sg
- **TTK Asia Ltd.** / 2107-2108 Kai Tak Commercial Building / 317 Des Voeux Road Central / Hongkong / T: +852.2858.7128 / F: +852.2858.8428 / www.ttkasia.com / 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 / cgalniche@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 / 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 / info@ttkcanada.com