



- ▶ Analog Leak Detection System
- ▶ Detection with Location
- ▶ LCD Display and LED Indicators
- ▶ MODBUS/JBUS Integrated
- ▶ Two Output Relays

## Description

The FG-ALS Alarm Location System 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).

A LCD display and three LED's on the front panel indicate presence of Power Supply (green), Leak Detected (red) or Cable Break (yellow). The FG-ALS also features an RS485MODBUS/JBUS serial link to integrate to a variety of intelligent monitoring systems.

If a leak is detected an audible alarm is triggered. The LCD display on the alarm unit front panel will show the distance in metres to the leak, the red LED is switched on and the leak relay is activated.

In the case of cable break an audible alarm is triggered, the yellow LED is switched on and the cable break relay is activated.

The SOUND OFF button on the front panel allows manual silencing of the audible alarm. The LED's and corresponding relays remain activated as long as the fault persists. When the fault is corrected the LEDs and relays return to normal status.

## Features & Benefits

### FEATURES

- Available in an attractive wall mounted unit (FG-ALS).
- The unit can control sense cables up to 150 metres.
- Visual and Audible indicators for the type of fault (leak or cable break).
- Two zero volt contact relays provide numerous signalling and centralised monitoring options.
- RS485 serial link with MODBUS provides a variety of intelligent interfacing options.

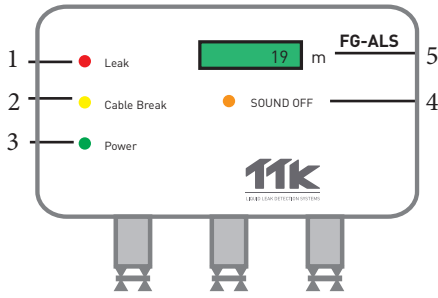
### BENEFITS

- Accurate reporting of leak location.
- Detects cable break faults.
- Compatible with existing monitoring systems.
- The FG-ALS unit is accurate and easy to use, ideal for small and medium applications where accurate leak location is required.

## Technical Data

<b>Compatibility</b>	Analog sense cables: FG-ECS, FG-ECX, FG-ACS, FG-ACX
<b>Enclosure Type</b>	ABS material (rated to UL94HB)
<b>Operating Temperature</b>	0°C to 50°C
<b>Serial Interface Physical Support</b>	Optoisolated two wire RS485
<b>Serial Link Parameters</b>	9600 bauds, 8 data bits, 1 stop, no parity
<b>Supported Protocol</b>	MODBUS, functions 3 and 4
<b>Relays Type: Leak + Cable Break</b>	1 SPDT single contact NO-NC
<b>Dry Relay Max. Switching Voltage</b>	125Vac or 220Vdc
<b>Relay Max. Switching Capacity</b>	60W (30V x 2A)
<b>Power Consumption</b>	2VA
<b>Supply Voltage</b>	230Vac / 110Vac — 50/60Hz or 12-24Vac, 15-30 Vdc
<b>Dimensions (W,H,D)</b>	172 x 86.6 x 55 mm

# Panel Description

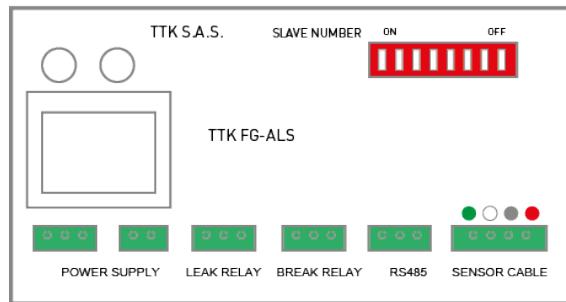


- 1: The leak signal (red LED) indicates that the system has detected a liquid leak.
- 2: The continuity signal (yellow LED) indicates that the system has detected a circuit interruption.
- 3: The power supply signal (green LED) indicates that the system is in normal operation.
- 4: The button is used to stop the audible alarm.
- 5: The displays shows the location of the leak in meters.

# Dimensions



FG-ALS Wall Mounted Unit



Connector Description

# Electrical Information

<b>Power Supply</b>	N : Neutral / P : Phase /  : 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-CLC Leader Cable</b>	A : Green wire / B : White wire / C : Black wire / D : Red wire

# Identification Codes

<b>FG-ALS</b>	Alarm location system unit FG-ALS fixed
<b>Accessories:</b>	
<b>FG-CLC</b>	Leader cable of 3.5 metres length
<b>FG-ECS, FG-ACS and FG-ECX, FG-ACX</b>	Water or acids sensing cable in 3m, 7m, and 15m in length
<b>FG-TMX</b>	End termination plug
<b>CFE-100C</b>	100 hold-down clips with adhesive
<b>ES-40</b>	40 tags

# Certificates



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

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

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