Liquid leak detection systems

UAP COOLING 1300 886 270

- Digital, Fully addressable √
- Instant Locating of Fault √
- Integrated Monitoring Software √
- Touch Screen Interface √
- TCP/IP & JBUS/MODBUS Connection √
- SD Card Slot Integrated √

FG-NET

Digital Unit for Leak Detection and Location

Product Datasheet

General

The FG-NET digital unit is designed to be used with all TTK digital sense cables.

In the event of a fault on the sense cables (leak or cable break):

Primary responses from the FG-NET:

- An audible alarm is triggered and a relay is activated.
- The touch screen of the panel displays the location of the leak (to the nearest 1 metre) and details of the fault (the type of fault leak or cable break), including the time and date the fault is registered.
- Optional – integrated maps of the leak detection installation highlighting the location of the fault, available on the touch screen display of FG-NET

Secondary advanced responses:

- Report to the BMS via a JBUS/MODBUS protocol. The FG-NET can drive dynamic drawings on the host BMS.
- Send email alerts and SNMP traps to a LAN-connected BMS, via a standard Ethernet connection.

FG-NET Digital Unit
Wall Mounted
W: 228 mm
H: 303 mm
D: 67 mm
Weight: 2.3kg

Features & Benefits

Features

- 7” (175mm) touch-screen gives a clear and detailed 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 panel.
- Up to 120 lengths of sense cables (or 1800 metres) can be managed independently.
- The system's reaction time to faults is adjustable cable by cable.
- Temporal isolation (72 hours maximum) a or several sense cables.
- Up to 5000 events stored in the history log.
- Non-volatile memory (SD), for storing user settings and drawings.
- Three types of interface for communication with a BMS available.
  - TCP/IP connection via an Ethernet port
  - JBUS/MODBUS RS232 or RS422/485 serial links
  - 9 relay contacts: 8 configurable relays + 1 specific relay for power interruption.
    - Dual relay drive (e.g. 1 for BMS and 1 for solenoid valve);
    - Relay positions are defined by a LED indicator.
- Different security levels to provide maximum security.

Benefits

- Pin-point location of a leak (to the nearest metre).
- Each sense cable is addressable and can be assigned a specific name.
- Multiple simultaneous leaks can be detected (120 cables = 120 alarms).
- Different types of sense cables (for detecting conductive & non-conductive liquids) can be connected on the same panel for a truly bespoke system.
- Cable break faults can be detected (to the nearest cable).
- When a cable break occurs, the system maintains its integrity by continuing to monitor all preceding cables for faults.
- Compatible with existing monitoring systems (Trend BMS etc.)
- Extension and upgrade of the system is easy. No additional power source or zoning panels are required.

FG-NET Digital Unit
Rack Mounted
W: 483 mm
H: 177 mm
D: 74 mm
Weight: 3kg

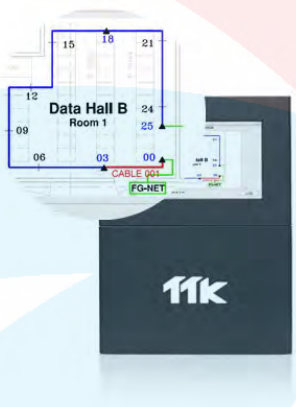
Touch Screen Menus

Four menus available for configuration of the FG-NET:

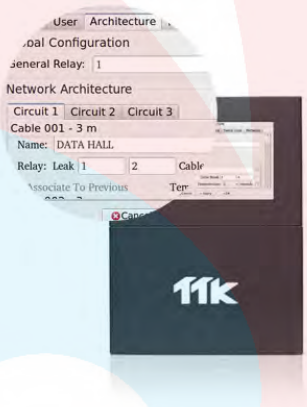
- **Setup:** Main page for setting up the system architecture, cable isolation and reaction time rules, acknowledge mode, user access, relay status, time zone, language, sound alarm, serial links and network functionalities. An administrator level password is required to access this menu. .
- **Event log:** For viewing the recorded alarm history. A maximum of 5000 events can be stored in the event log.
- **Cables:** To give the user a general overview of the site installation. The interactive floor plan can be viewed under this menu as an optional feature.
- **Help:** Provides troubleshooting procedures, contact details of the manufacturer and the reference number of the unit.

Simultaneous alarms displayed on one screen

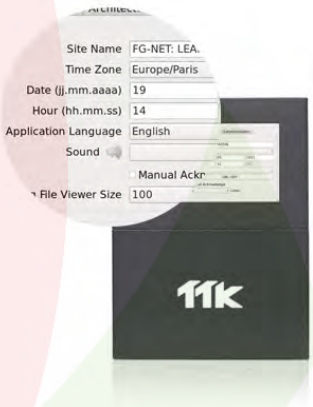
Dynamic map shows leak in real time



Easy setup of relays for each cable



User-friendly interface of configuration



Technical Data

Compatibility:	Sense cables (digital): FG-EC, FG-AC, FG-HC2 kit Sense cables (analogue through FG-DTCS box): FG-ECS, FG-ACS Accessories: Belden 8723 jumper cable, FG-DTC, FG-DTCS, FG-CLC, FG-TMC
Maximum Length of Sense Cable:	1800 meters (600 meters per circuit)
Accuracy:	+/- 1 meter
Operating Languages:	English, French, German
Voltage Input:	100 to 240 VAC, 50-60 Hz
Power Consumption:	36VA Max
Functioning Temperature Range:	5°C to 40°C
Functioning Humidity Range:	5% to 80% non-condensing
Altitude	2000 m Max
Relay types:	Volt free dry contact (NO, NC, COM)
Relay numbers:	9 (8 + 1 power failure relay)
Serial Connection:	JBUS/Modbus RS232 or RS422/485
Maximum Switching Voltage:	125 V AC and 60 V DC
Maximum Switching Capacity:	60 VA or 30 W
Ingress Protection:	IP40—Indoor use only

Identification Codes

FG-NET (Wall Mounted)	FG-NET Digital Unit Wall Mounted in Plastic Enclosure
FG-NET (Rack Mounted)	FG-NET Digital Unit Rack Mounted in 19” & 4U
FG-EC, FG-AC or FG-HC2	Digital Sensing Cables in 3m, 7m, and 15m lengths
Accessories	
FG-CLC	Leader Cable (Belden ref. 8723 in 3,5m lengths)
FG-TMC	End Termination Plug
FG-DTC	“T” Branch, Diversion Box

All the connections in the FG-NET digital unit must be done with the power supply switched off. Read carefully the installation procedure for the FG-NET digital unit.

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