Technical Information

OL-ECAT





Description

OL-ECAT is a high-performance addressable alarm terminal with 7- or 12-inch touchscreen controller, designed for interfacing with acquisition modules manufactured by OmniLeak. The communication with these modules is based on a proprietary long-range failsafe bus. Both versions are offered in IP54/NEMA 3S water-resistant wall-mounted enclosures, and can be installed in technical rooms and other premises where dripping water might be potentially present. The primary use of OL-ECAT is to monitor up to four circuits with long detection strings for conductive liquids or hydrocarbons of up to 1200 m each. The communication frontend permits robust and reliable operation even in case of partial failure of the circuit of acquisition modules. Each individual acquisition module is connected to an independent sensor cable and the system provides true multi-leak capability. All compatible acquisition modules are powered by the terminal through the proprietary bus and the need of additional infrastructure is considerably reduced. The maximum distance covered with this wired layout (accumulated sensor and jumper cables) is in excess of 2 km. The optional loopback wiring increases the system reliability in case of cable breaks and shorts. This provides a redundancy architecture. Alarm threshold adjustment on each sensing cable installed is possible.



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The intuitive password-protected user interface on the touch panel provides flexible configuration and adjustable alarm threshold.

High-level interfacing to BMS/DCS/SCADA is implemented through Modbus RTU, Modbus TCP, email alerts and SNMP Traps. Configurable dry contacts (number 12) for general alarm, leak alarm, power failure and trouble are also available.

Features and Benefits

- Very long range of leak detection circuit & a pin-point location of fault in the circuit
- Easy T-branching no special devices/components needed
- Adjustable alarm threshold (sensitivity 1-9)
- Can be installed in humid environments
- Able to interface with sensor cables and modules for various types of liquids as water, acids, bases, hydrocarbons, organic solvents, etc.

Typical Applications

- Leak detection in data centers and mission critical infrastructure.
- Banking and commercial Buildings
- Pump Rooms
- HVAC Plant rooms
- Remote chemical facilities
- Monitoring of Military and Scientific depots
- Chilled water piping applications
- Telecom and High Rise Buildings
- Stadiums and Museums
- Tank farms & Airports

Compatible Acquisition Modules and Remote Devices

OL-SSC	(Farence)	Smart sensing cable for detecting conductive liquids indoor. Contains an addressable miniature electronic device embedded in the male connector. Maximum length of sensor: 15 m
OL-SLDM	2	Acquisition module for interfacing with sensor cables for detecting unwanted presence of conductive liquids in indoor environment. Maximum length of sensor string per Module: 15 m
OL-ASAT (all versions)	- 1 m	Interfacing with OL-ECAT12 only: Dual-channel alarm terminal for circuits with a maximum of 10 acquisition modules each, with Modbus RTU/TCP, SNMP Traps and 12 SPDT relay outputs

Technical Data

Display Size and Resolution	OL-ECAT7: 7-in TFT, 800 x 480; OL-eCAT12: 12-in TFT, 1024 x 768
Dimensions (LxWxD)	OL-ECAT7: 295 x 260 x 125 mm; OL-eCAT12: 400 x 300 x 180 mm
Weight	OL-ECAT7: 1.3 kg; OL-ECAT12: 7.8 kg
Fire Rating	OL-ECAT7: UL94-HB; OL-ECAT12: non-rated (fire-proof steel enclosure)
Ingress Rating	IP54/NEMA 3S - indoor use only
Operating Temperature Range	0°C to +55°C
Power Supply Input	100-240VAC or 24VDC(Optional)
Maximum Length of Cable	Accumulated length of Sensor and Lead Cables per output: 2.5 km
Power Consumption	OL-ECAT7: 18.5W max; OL-ECAT12: 36W max
Audible Sounder	80dB max. Buzzer with Silence button
Relay Contact	Power Failure + Leak + Cable Break :- SPDT (NO/NC)
Relay Switching Voltage	SPDT - Switching current - 0.5 A at 250 VAC 1A at 30 VDC
Relay Switching Power	60W
Supported Protocol (Monitoring)	Modbus RS485, Modbus TCP/IP, Bacnet over IP (External Gateway)
Installation	Wall-mounted (Flush mount possible)

OL-ECAT alarm terminal is an agency-approved device, with cULus Listed display controller. It shall be used according to the relevant local regulations and installed by qualified personnel.

Product Codes

OL-ECAT7	Extended coverage alarm terminal with 7-in LCD for up to 4 circuits with a maximum of 50 acquisition modules each, with Modbus RTU/TCP, SNMP Traps and 12 SPDT relay outputs
OL-ECAT12	Extended coverage alarm terminal with 12-in LCD for up to 4 circuits with a maximum of 50 acquisition modules each, with Modbus RTU/TCP, SNMP Traps and 12 SPDT relay outputs

Manufacturer

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Certifications



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