TTDM-128

RAYCHEM
TraceTek

LEAK DETECTION MASTER MODULE

300 mm
(11.81 in)
20 mm (0.79 in)
261 mm (10.28 in)
20 mm (0.79 in)
85 mm (3.35 in)
25 mm (1 in)
200 mm (7.87 in)
240 mm (9.45 in)

CH01 SIM
SIM Normal
TRACETEK   TTDM-128

7 mm (5/16 in) mounting hole (4 places)
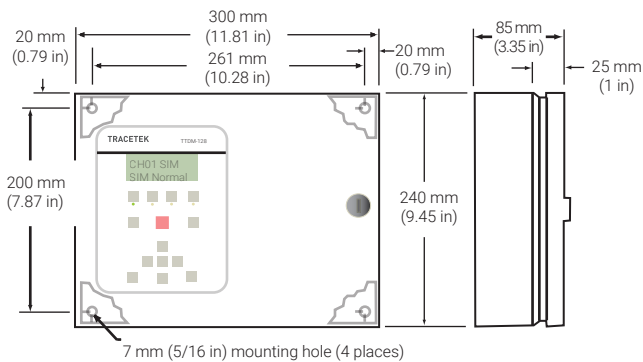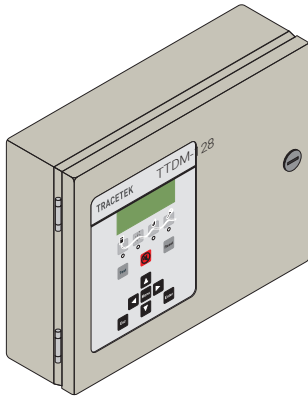
PRODUCT OVERVIEW

Easy setup and simple operation

The nVent RAYCHEM TTDM-128 module directly monitors up to 1500 m (5000 ft) of sensor cable and a network of up to 128 remote Tracetek modules. The remote modules may be a combination of sensor interface modules (TTSIM), relay modules (TT-NRM) or additional TTDM-128 modules. With its networking capability, the TTDM-128 provides tremendous flexibility in terms of system layout options and monitoring capability.

When liquid is detected on any of the sensors, the TTDM-128 sounds an alarm, closes relay contacts, turns on a front panel LED and displays the circuit identification and location of the leak on the alphanumeric display. The leak detection event is logged to a non-volatile event history file. All status and event information is made available via the front panel keyboard or RS232/RS485 modbus digital communication to a host computer, PLC or plant/building automation system.

Each sensor circuit detects, locates and tracks leaks independently from any other circuits connected to the TTDM-128. There is no loss of sensitivity and no re-mapping required after an initial leak is detected. A simple map showing where the sensors are installed is the only field calibration requirement.

Design features

- Multiple event tracking capability for up to 128 independent sensor circuits.

- Summary relay contacts, LED status lights, LCD information display at the TTDM-128 panel.

- Standard external interface modes include: dry contacts, and RS232/RS485 modbus communication. A 4-20 mA analog output option is available.

- Event history accessible from the front panel or via serial port to identify type of event, time, location, and other parameters for all sensor events or user adjustments and interventions.

- Layered password protection for setup changes.

- Adjustable sensitivity and selectable measurement units.

- Universal power supply for 110/220 Vac 50/60 Hz (24 volt option available).

- Non-volatile memory for event history, setup and network configuration.

- Complete remote operation and monitoring through modbus communications or using optional TT-SUPERVISOR Windows software.

TRACETEK NETWORK ARRANGEMENT
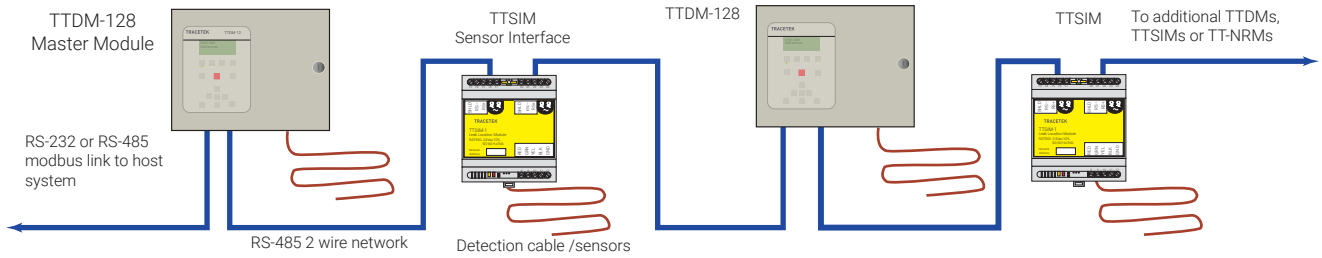
GENERAL FEATURES

Sensor compatibility	All Tracetek sensor cables and point sensors or contact closure devices
Maximum size of network	
Number of TTSIM modules	128 (less number of TT-NRMs installed)
Maximum number of TT-NRM	10
Precision	± 0.1% of circuit length
Units	Feet, meters or zones
Display language	English, French, German, Spanish, Japanese, Italian

ORDERING INFORMATION

	Catalog number	Part number	Description
Supply voltage	TTDM-128	P000000091	115 V + 15%, - 20% ; 230 V ± 10% ; 50/60 Hz
	TTDM-128-24V	P000000092	24 V AC + 5%, - 35% ; 24 V DC ± 20%
Accessories	TT-NRM	E03411-000	Network relay module
	TTSIM-1	see H56858	Network sensor interface module
	TTSIM-1A	see H57387	Network sensor interface module with relay
	TTSIM-2	see H57346	Network sensor interface module with relay
	TTDM-4/20	688799-000	4-20 mA analog output board
	TT-SUPERVISOR	591416-000	Windows based PC software

TTDM-128 LEAK DETECTION MASTER MODULE
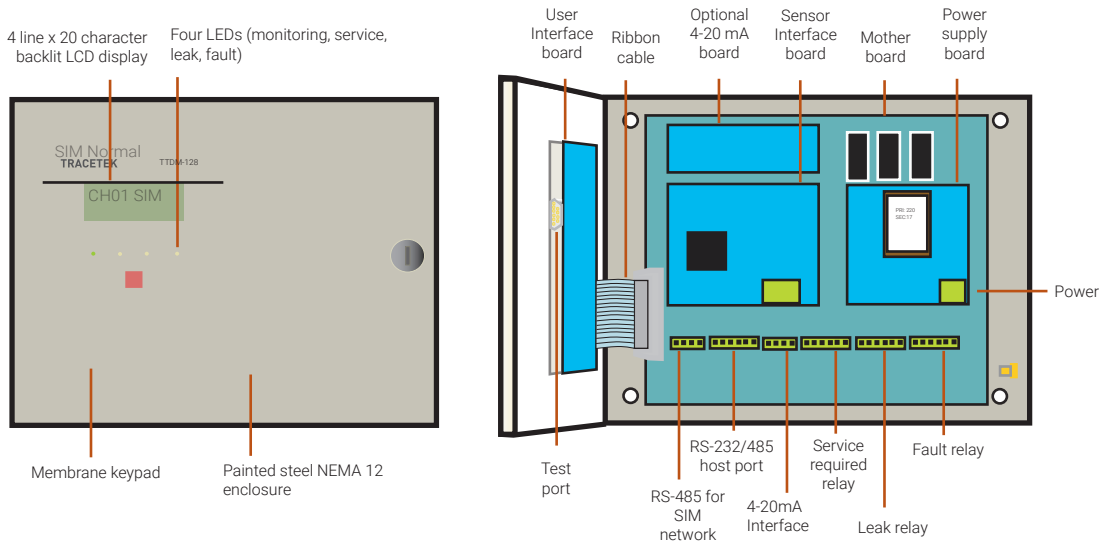
ENVIRONMENTAL

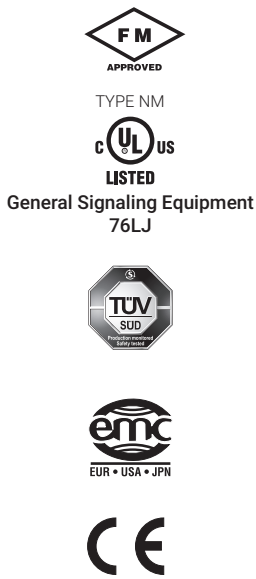|	
Storage temperature	−18°C to 60°C (0°F to 140°F)
Operating temperature	0°C to 50°C (32°F to 122°F)
Humidity	5% to 95% non-condensing

AUDIBLE ALARM

Piezo electric

POWER CONSUMPTION

TTDM-128	10 VA
TTDM-128-24V	12 VA

INTERFACES

Relays	
Number	3 (service required, leak, fault)
Type	DPDT
Ratings	5 A at 250 V AC / 24 V DC
Tracetek network port	RS-485 (2 wire)
External serial port (to host)	RS232 (3 or 5 wire) or RS485 (2 wire)

APPROVALS AND CERTIFICATIONS

FM APPROVED

TYPE NM
c(UL)us
LISTED
General Signaling Equipment
76LJ

TÜV SUD
Production monitored
Safety tested

emc
EUR • USA • JPN
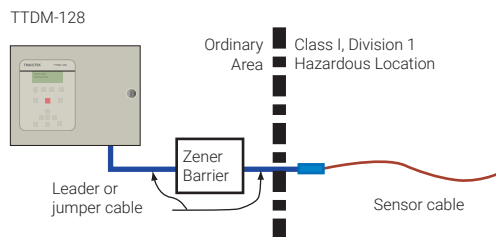
CE

The TTDM-128 unit is approved for use in ordinary areas. The module must be located in an ordinary area, but may monitor intrinsically safe Tracetek sensors located in hazardous locations, as shown below.
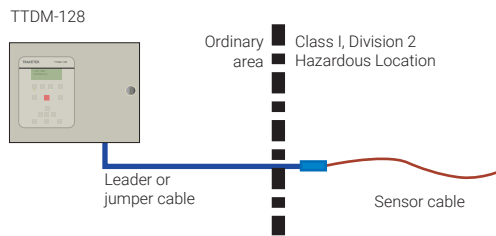
Tracetek sensors in Class I, Division 2, Groups A, B, C, D Hazardous Locations (Zone 2 in Europe).

If protected by an agency approved zener barrier, Tracetek sensors in Class I, Division 1, Groups A, B, C, D Hazardous Locations (Zones 0 and 1 in Europe). Contact nVent Solutions to select proper zener barrier.

The TTDM-128 enclosure is NEMA 12 (IP 54).

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