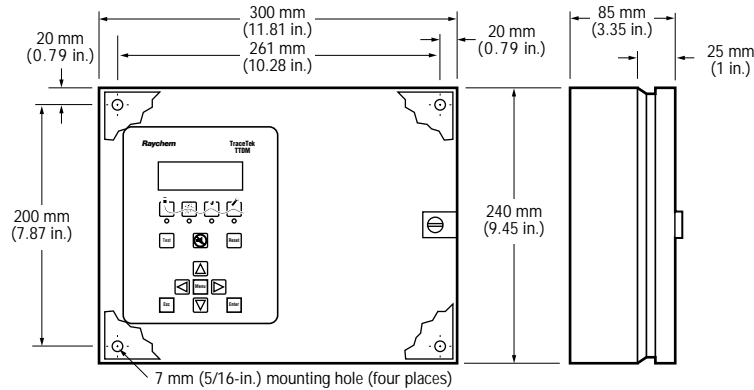
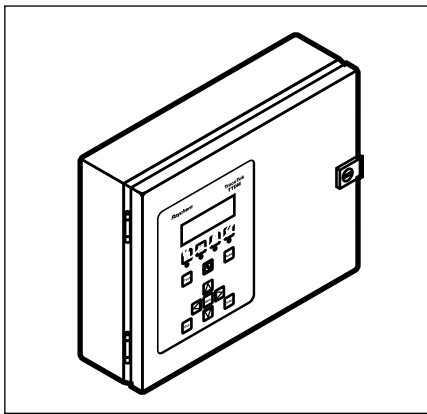


### Easy setup and simple operation

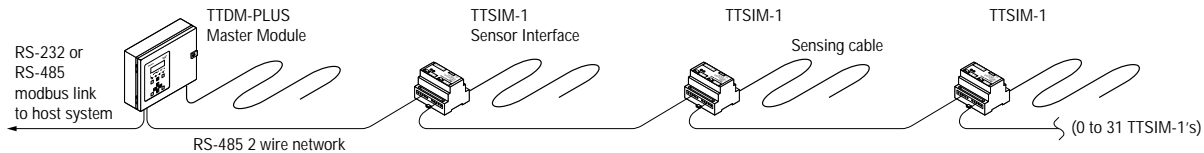
The TTDM-PLUS unit monitors up to 5000 feet (1500 m) and/or up to 31 external TTSIM-1 units. Each TTSIM-1 unit can monitor an additional 5000 foot (1500 m) length of sensor cable, providing total system capacity in excess of 150,000 feet or more than 48 km. When liquid is detected on any segment of sensor cable, the TTDM-PLUS sounds and alarm, closes relay contacts, turns on an LED and displays the channel number and location of the leak on an LCD display. The leak detection event is logged to an event history file and all status and event information is made available via RS232/RS485 modbus to any host PLC or plant or building automation system. A simple map showing where the sensor cable has been installed is the only field calibration requirement. Each segment of sensor cable detects, locates and tracks leaks entirely independent from one another. There is no loss of sensitivity and no re-mapping required after an initial leak is detected.

### Design Features:

- Multiple event tracking capability for up to 32 independent sensor cable segments.
- Summary relay contacts, LED status lights, LCD event information display at the TTDM-PLUS panel.
- Standard external interface modes include: dry contacts, 4-20 mA analog, RS232/RS485 modbus.
- Event history accessible from the front panel or via the serial port to identify, type of event, time, location, etc. for all sensor events or user adjustments and interventions.
- Layered password protection for setup changes.
- Adjustable sensitivity, selectable units: feet, meters.
- Universal power supply for 120/240 Vac 50/60 Hz. (24 volt factory option).
- Non-volatile memory for event history, set-up and network configuration.
- Complete remote operation and monitoring through any generic GUI with modbus, or optional Win 95/98/NT application.



### TraceTek network arrangement



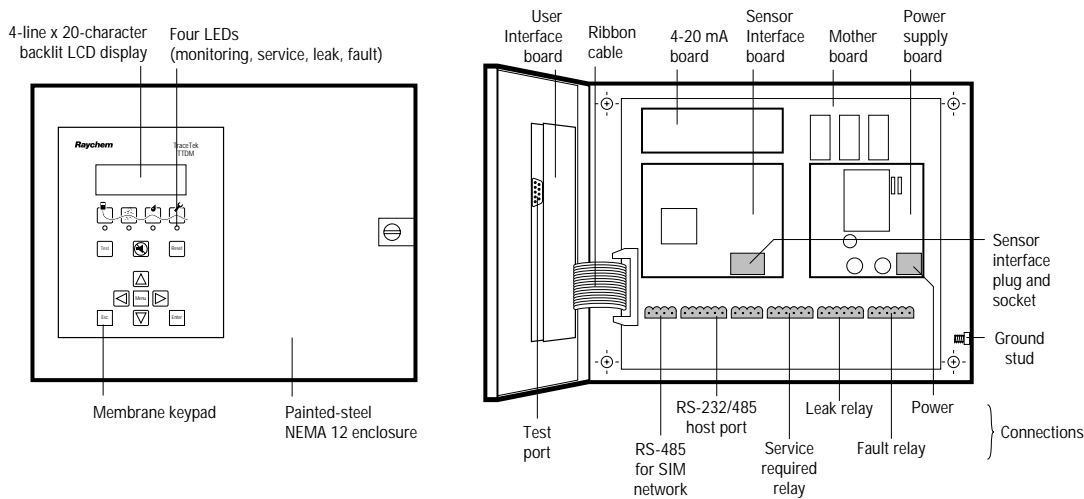
### General features

Sensing cable compatibility	All TT1000, TT3000, and TT5000 series sensing cables or contact closure device
<b>Maximum size of network</b>	
Number of TTSIM-1s	31 plus SI in TTDM-PLUS
Maximum length of sensing cables	32 X 5000 ft (1500 m); total 160,000 ft (48 km)
Precision	±0.1% of segment length
Units	Feet, meters (selectable)
Display language	English, French, German, Spanish, Japanese, Italian.

### Ordering Information

	Catalog Number	Description
Supply voltage	TTDM-PLUS	115 V +15%, -20%; 230 V ±10%; 50/60 Hz
	TTDM-PLUS-24	24 Vac +5%, -35%; 24 Vdc ±20%
Spares	TTDM-PS24	24 Vac/dc power supply
	TTDM-PS	115/240 Vac power supply
	TTDM-SI	Sensor interface
	TTDM-MB	Motherboard
	TTDM-EPROM	Software
	TTDM-UI	Network mstr user interface

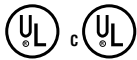
# TTDM-PLUS Leak Detection Master Module



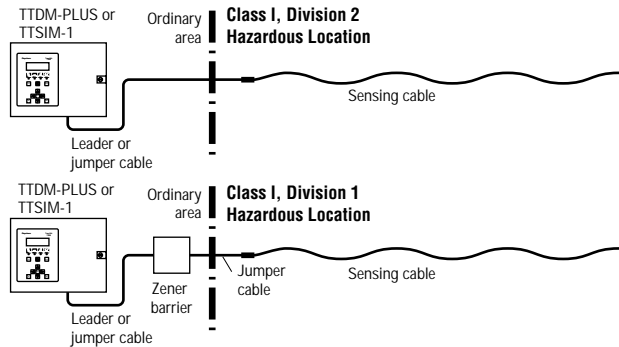
<b>Temperature</b>	Storage	0°F to 140°F (-18°C to 60°C)
	Operating	32°F to 122°F (0°C to 50°C)
<b>Humidity</b>		5% to 95% noncondensing
<b>Audible alarm</b>	Piezo electric	
<b>Power consumption</b>	<6 VA (5 W)	
<b>Interfaces</b>	Relays	Number: 3 (service required, leak, fault) Type: DPDT Rating: 5 A at 250 Vac/24 Vdc
	TraceTek Network Port	RS-485 (2-wire)
	External Serial Port (to Host)	RS-232 (3- or 5-wire connection) or RS-485 (2-wire connection)

## Approvals and certifications

The TTDM-PLUS unit is approved for use in ordinary areas. The module must be located in an ordinary area, but may monitor intrinsically safe TraceTek sensing cables located in hazardous locations, as shown below. TYPE NM.



LISTED  
76LJ  
SIGNAL SYSTEM UNIT



TraceTek sensing cable 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 sensing cable in Class I, Division 1, Groups A, B, C, D Hazardous Locations (Zone 0 or Zone 1 in Europe). Contact Raychem HTS to select proper zener barrier.

The TTDM-PLUS enclosure is NEMA 12, IP54.

## Electromagnetic compatibility



Compliant with standards for immunity	EN50082-1 (light industrial)
Compliant with standards for emissions	EN50081-1 (residential/commercial) EN55022 and FCC Part 15, Class B



The TraceTek products group is a part of Raychem HTS, which is ISO 9001 certified worldwide.

## Raychem HTS

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Menlo Park, California 94025-1164  
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Fax (800) 611-2323  
Fax-on-Demand (800) 329-4494  
info@raychemhts.com  
www.tracetek.com

**Important:** All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Raychem HTS makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Raychem HTS's only obligations are those in the Raychem HTS Standard Terms and Conditions of Sale for this product, and in no case will Raychem HTS or its distributors be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use, or misuse of the product. Specifications are subject to change without notice. In addition, Raychem HTS reserves the right to make changes—without notification to Buyer—to processing or materials that do not affect compliance with any applicable specification.