## Raychem

### TTDM-NMM

# **TraceTek Leak Detection and Location Network Master Module**

#### Easy setup and simple operation

The TTDM-NMM unit monitors up to 5000 ft (1500 m) of cable and 15 TTDM-SIM units. Separate LEDs give clear indication of system status. When liquid is detected on any channel, the TTDM-NMM unit sounds an alarm and displays the channel number and location of the leak. The TTDM-NMM continues to monitor all channels and will re-alarm if there are any major changes. Once the alarm condition has been cleared, the module is reset with a single keystroke. As with all TraceTek modules, no calibration is required.

#### **Full featured**

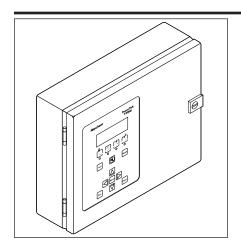
The TTDM-NMM incorporates the following features:

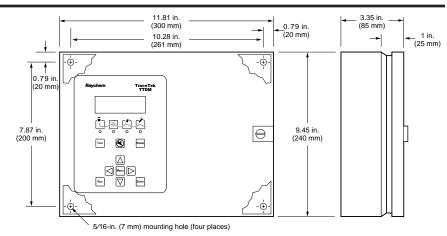
- The unit has built-in system-wide diagnostic functions.
- In addition to detecting leaks, the TTDM-NMM unit warns of fault conditions and indicates when service is required.
- An events history log allows leaks (and other events) to be tracked for the NMM and each attached TTDM-SIM unit.
- Both the events history log and any user settings are held in nonvolatile memory.

#### Versatile design

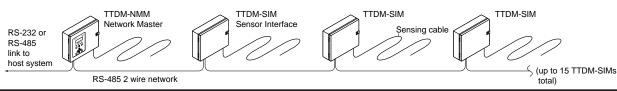
The settings can be customized to suit the user's application:

- User selectable units: feet, meters, or zones
- Two different interface types for connection to building management and process control systems:
  - Three alarm status relays
  - RS-232/RS-485 serial port
- Three voltage ranges (115 Vac, 230 Vac, 24 Vac/Vdc)



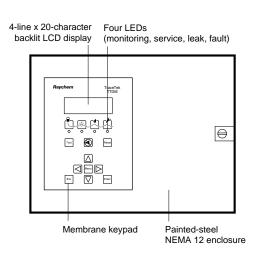


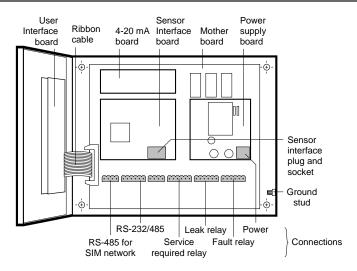
#### TraceTek network arrangement



General features	Sensing cable compatibility		All TT1000, TT3000, and TT5000 series sensing cables All TT100, TT300, and TT500 series long-line sensing cables		
	Maximum size of network				
	Number of TTDM-SIMs		15 plus SI in TTDM-NMM		
	Maximum length of sensing cables		16 X 5000 ft (1500 m); total 80,000 ft		
	Maximum number of zones Precision Units Language		16 X 100; total 1600 zones ±0.1% of connected sensing cable length Feet, meters, zones (selectable) English		
Ordering Information					Catalog Number
Supply voltage	TTDM-NMM-24		24 Vac +5%, -35%; 24 Vdc ±20%		
	TTDM-NMM-1		115 V +15%, -20%; 50/60 Hz		
	TTDM-NMM-2	TTDM-NMM-2		230 V ±10%; 50/60 Hz	
Spares	TTDM-PS24	24 Vac/dc power supply	TTDM-SI	Sensor interface	
	TTDM-PS1	115 Vac power supply	TTDM-MB	Motherboard	
	TTDM-PS2	230 Vac power supply	TTDM-NMM-U	Network mstr user interface	

#### TTDM-NMM Leak Detection and Location Network Master Module





Temperature	Storage	0°F to 140°F (-18°C to 60°C)		
	Operating	32°F to 122°F (0°C to 50°C)		
Humidity		5% to 95% noncondensing		
Audible alarm	Piezo electric			
Power consumption	<6 VA (5 W)			
Interfaces	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	RS-232 (3- or 5-wire connection) or		
		RS-485 (2-wire connection)		

#### Approvals and certifications pending

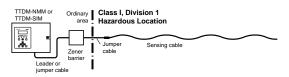
The TTDM-NMM unit is approved for use in ordinary areas. The module must be located in an ordinary area, but may monitor intrinsically safe TraceTek sensing cables located in hazardous locations, as shown below.





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 to select proper zener barrier.

The TTDM-NMM 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	
	Certifications pending.	



The TraceTek products group is a part of Raychem's Commercial and Industrial Infrastructure Division, which is ISO 9001 certified worldwide.

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