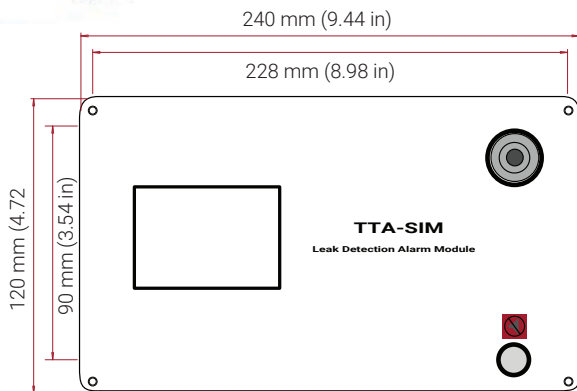


ALARM MODULE



PRODUCT OVERVIEW

Easy setup and simple operation

The nVent RAYCHEM TraceTek TTA-SIM has been designed for use with nVent RAYCHEM TraceTek sensing cables, point sensors and normally open, dry contact devices (float switch, pressure or vacuum switch, optical probe with adapter, limit switch, etc.). Up to 150 m (500 ft) of sensor cable can be monitored by the TTA-SIM.

When liquid is detected, the unit indicates the leak with an LED and audible alarm, and switches a relay to provide local voltage-free contact closure. The leak location is measured and can be communicated to a host monitoring system. With the TTA-SIM-2 option, the leak location is displayed on a built-in LCD readout. No field calibration is required.

The TTA-SIM can be used as a stand-alone leak detection alarm unit, or it can be installed in networks with other nVent RAYCHEM TraceTek TTA-SIM, TTSIM, TT-NRM or TTDM-128 modules. The TTA-SIM can be configured using a Microsoft Windows™ based PC or a TraceTek TTDM-128 network master module.

Design Features

- Rugged polycarbonate enclosure for tough environments.
- 60 dB Audible alarm with silence button.
- Voltage-free contacts for alarm signaling.
- LEDs to indicate power, leak, cable trouble, and communication status.
- Optional LCD leak location display.
- Simple twisted shielded pair serial RS-485 communications using a variety of communication protocols (protocol selection is automatic).
- Available for 120 or 230 Vac 50/60 Hz power supply.
- Relay software selectable for normally energized or normally de-energized operation.

GENERAL FEATURES

Sensor compatibility	All TraceTek sensing cables and point sensors or contact closure devices
Maximum length of sensing cable	150 m (500 ft)
Precision	0.5% of sensor length ± 0.6 m (2 ft)
Audible alarm	>60 decibels at 0.6m (1 ft)

ENVIRONMENTAL RATINGS

Storage temperature	-18°C to 60°C (0°F to 140°F)
Operating temperature	0°C to 50°C (32°F to 122°F)
Enclosure integrity	NEMA 1 / IP 20 (non-hazardous locations only)
Humidity	5% to 95% non-condensing

POWER REQUIREMENTS

TTA-SIM-1A-120 & TTA-SIM-2-120	96 to 132 Vac, 50/60 Hz, 3 W
TTA-SIM-1A-230 & TTA-SIM-2-230	216 to 253 Vac, 50/60 Hz, 3 W

ORDERING INFORMATION

Catalog Number	Description
TTA-SIM-1A-120	120 Vac TTA-SIM
TTA-SIM-2-120	120 Vac TTA-SIM with leak location display
TTA-SIM-1A-230	230 Vac TTA-SIM
TTA-SIM-2-230	230 Vac TTA-SIM with leak location display

SERIAL INTERFACE

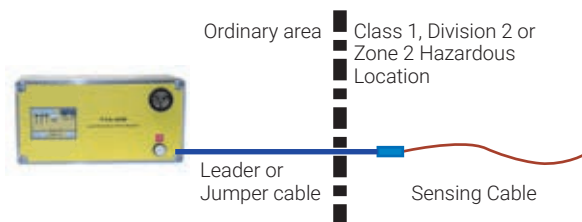
Network configuration	RS-485 two wire (twisted shielded pair) network, 9600 baud, addressable from 1 to 127
Communication protocol	Modbus, OptoMux™ or Johnson Controls Metasys®

RELAY CONTACTS

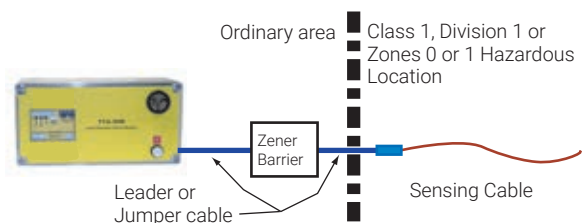
Type	Form C (SPDT)
Action	Software selectable; normally energized or normally de-energized; alarm on leak only, or alarm on either leak or sensor fault
Rating	2 Amps maximum, 250 Vac or 30 Vdc

APPLICATIONS

Although the TTA-SIM module must be installed in a non-hazardous location, it may monitor intrinsically safe nVent RAYCHEM TraceTek sensors located in hazardous areas 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 to select proper zener barrier.

APPROVALS



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