National Fire Equipment Ltd.

Aspirating Smoke Detector TITANUS TOP·SENS®

Cold Storage Version

TITANUS® aspirating smoke detector

The TITANUS® family of aspirating smoke detectors covers standard to very early warning fire detection as well as a wide range of extreme applications without compromising high levels of sensitivity and performance.

Technology

TITANUS TOP·SENS® aspirating smoke detection system combines High-Power-Light-Source (HPLS) technology with patented LOGIC·SENS™ fire pattern recognition algorithms and a large portfolio of custom accessories to ensure that each system will maintain high levels of sensitivity and false alarm immunity even in challenging environments. Its modular design facilitates cost effective solutions for a wide range of specialized requirements. Optional second plug-in detector module allows one aspirating unit to economically monitor two separate areas or alternatively to be used for cross-zoning alarm verification. TITANUS TOP·SENS® comes with dry contacts for connection to any fire panel as well as free slots for inserting bus modules.

Advantage

- Installation inside cold storage facilities to avoid condensation and ice build-up.
- High reliability and extended service life due to physical separation of disturbing influences such as dust, vapor or radiation from the measuring chamber.
- TITANUS® PipeXpress software for highly reliable ASD planning with just a few mouse clicks.
- Time-saving Installation and commissioning thanks to plug & play philosophy.
- Discreet installation for maintaining aesthetics and providing safety against vandalism.
- Intelligent diagnostics tool gives support at inspection and service.
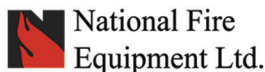
Features

- System coverage up to 64,560 ft² (6,000 m²) or rather 32,280 ft² (3,000 m²) per detector module
- High-Power-Light-Source (HPLS) for standard to very high sensitivity
- LOGIC·SENS™ for very high immunity to false alarms
- PIPE·GUARD patented air flow monitoring system, sensing changes in total airflow as little as +/-10 %
- Optional 2nd detector module for cross-zoning alarm verification or increased area of coverage
- Up to 984 ft (300 m) pipe length and up to 63 holes per detector module
- Designed for harsh environments, with a wide range of accessories for special applications
- 3 alarm levels per detector module for tiered alerting
- Bar graph smoke level display
- Optional Ethernet (TCP/IP) / SNMP / data loger
- Operating temperature: -40 °F to +140 °F (-40 °C to +60 °C) depending on version
- Also available as TITANUS TOP·SENS® standard and SILENT version

Approvals

Additional approvals on request and / or at **www.wagnergroup.com**

National Fire Equipment Ltd.

TORONTO: (905) 761-6355
Toll Free: (800) 267-8508

OTTAWA: (613) 723-6071

VANCOUVER: (604) 420-1131
Toll Free: (800)-667-2138

BURNABY: (604)-299-4498

www.nationalfire.com

EDMONTON: (780) 455-3870
Toll Free: (888)-891-1008

CALGARY: (403) 236-5661

MONCTON: (506) 859-7277
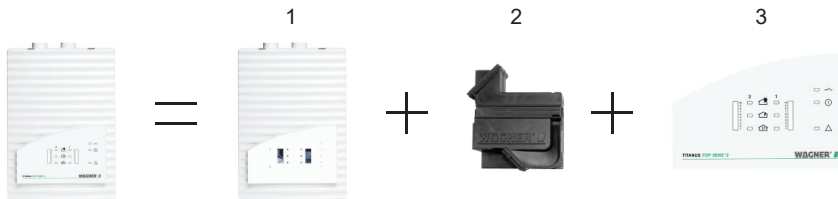Toll Free: (877) 816-3473

MISSISSAUGA: (905) 565-1385

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Aspirating Smoke Detector | TITANUS TOP·SENS®

TITANUS TOP·SENS® | Components

1   2   3

The aspirating smoke detector consists of the basic device (1), one or two detector modules (2) and an adhesive front film sheet (3).

TITANUS TOP·SENS®

System	**TITANUS TOP·SENS®**
	Cold Storage Version

1 Basic Device

Type	**TP-1-F-U**
Max. Main Alarm Sensitivity	0.005 % obsc./ft (0.015 % obsc./m)
No. of Detector Modules (Zones)	1 or 2
Max. No. of Aspiration Holes	2 x 63
Max. Area of Coverage	64,560 ft² (6,000 m²) per system / 32,280 ft² (3,000 m²) per zone
Max. Pipe Length	1 x 980 ft (1 x 300 m) per zone
Cross-Zoning Alarm Verification	optional with 2nd detector module
No. of Alarm Levels per Zone	3
No. of Output Relays (1 A / 30 VDC)	8 relays (changeover / form C)
Front Indicators	Fault; Operation; per Zone: 3 x Alarm, 1 x Bar Graph (Smoke Level)
Ethernet / SNMP / Data Logger (SD Card)	optional[1]
Binary Data Logger	standard
Supply Voltage	24 V DC (14 to 30 V DC)
Current Consumption min. Operational (1 Detector Module, 24 V DC) Alarm	200 mA 230 mA
Current Consumption min. Operational (2 Detector Module, 24 V DC) Alarm	230 mA 290 mA
Operating Temperature	-40 °F to +140 °F (-20 °C to +60 °C)
Humidity Range	10 % to 95 % (noncondensing)
Sound Pressure Level (ISO 3744)	as low as 45 dB(A)
Dimensions	4.5 x 7.9 x 11.5 inches (113 x 200 x 292 mm)
Weight (Basic Configuration)	3.0 lbs + 0.22 lbs (1,350 g + 100 g) per detector module
Pipe Specification	63 / 64 inches (25 mm)
IP Rating	standard: IP 20 / optional: IP 52

2 Detector Modules

Type	**DM-TT-50-L-F-U**	**DM-TT-10-L-F-U**	**DM-TT-01-L-F-U**
Weight		0.22 lbs (100 g)	
Sensitivity Rating	Standard	Medium	High
Max. Main Alarm Sensitivity	0.15 % obsc./ft (0.5 % obsc./ft)	0.03 % obsc./ft (0.10 % obsc./m)	0.005 % obsc./ft (0.015 % obsc./m)

3 Adhesive Front Film Sheets

Using 1(2) Detector Modules, Type	**FW-TT-1 (FW-TT-2; for indicating external shutdown: FW-TT-3)**

[1] Network Module with Data Logger: NU-5-D-F; Data Logger only: NU-5-DO-F