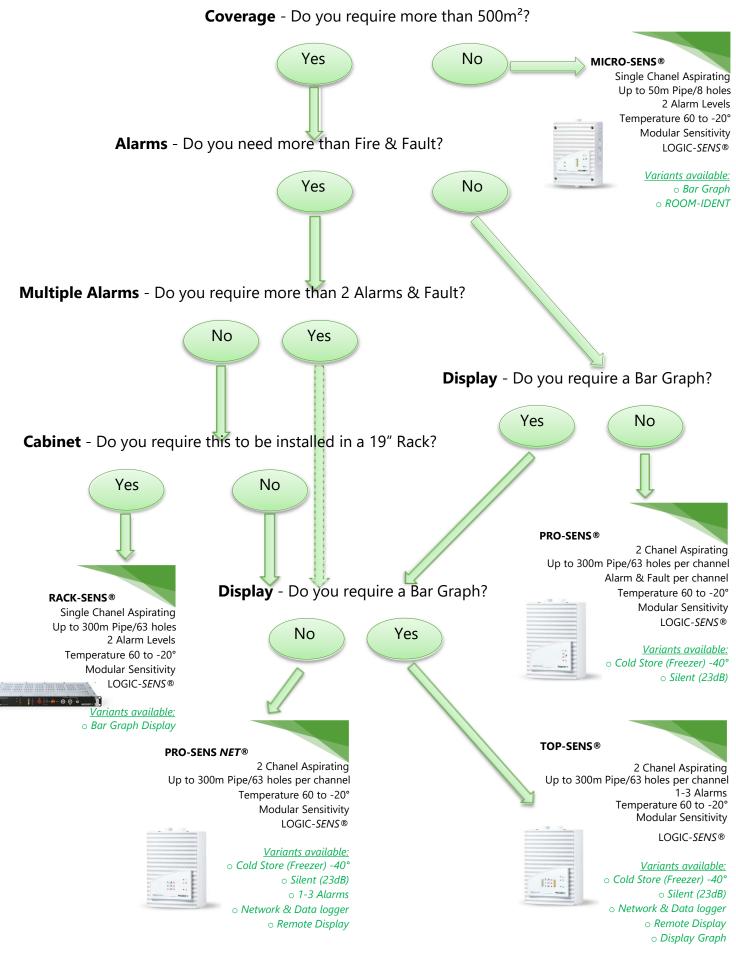


Design Guide to choosing the correct Titanus Aspirating System







<sup>\*\*</sup>Please note that the above are maximum distances depending on the design and PipeXpress calculations



# **MICRO-SENS®**

The Titanus Micro-Sens® is designed for smaller applications with harsh environments with a wide range of accessories and applications.

- ☐ Single pipe aspirating system (1 channel) with:
  - Up to 50m of pipe length (40m straight pipe run)
  - o Coverage of up to 400m<sup>2</sup>
  - o 2 Alarm outputs
  - Up to 8 sampling holes
  - Modular Sensitivity

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- □ Operating Temperatures 60° to -20°
- □ IP54
- □ PIPE-Guard patented airflow monitoring system sensing changes in the airflow from as little as =/- 10%
- Optional Cold Storage version for operating temperatures down to -40°
- ☐ Optional Bar Graph level display
- □ Optional ROOM-IDENT version with up to 5 individual rooms indications
- Optional Ethernet & Data logger



- □ Standard
- □ Bar Graph
- □ ROOM-IDENT



\*\*Diagnostic Tool is required for commissioning and servicing

## The components



The aspirating smoke detector consists of the detection unit (1), a device base (2) and an adhesive front film sheet (3).



	Part no.	Туре	Device
Ī	AD-05-3500	HB-TM	Device Base TITANUS MICRO-SENS
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AD-05-4300	DM-TM-50	Detection Unit TITANUS MICRO·SENS - Basic Device
AD-05-4000	DM-TM-10	Detection Unit TITANUS MICRO·SENS - Basic Device
AD-05-4320	DM-TM-B-50	Detection Unit TITANUS MICRO-SENS - Bar Graph
AD-05-4020	DM-TM-B-10	Detection Unit TITANUS MICRO-SENS - Bar Graph
AD-05-4310	DM-TM-R-50	Detection Unit TITANUS MICRO·SENS - Room Ident



AD-10-1400	FW-TM	Front film sheet TITANUS MICRO·SENS
AD-10-1420	FW-TM-B	Front film sheet TITANUS MICRO·SENS
AD-10-1410	FW-TM-R	Front film sheet TITANUS MICRO·SENS

#### **FILTER**

AD-10-1960	LF-AD	Air Filter Assy c/w Filter Elements		
DIAGNOSTI	DIAGNOSTICS TOOL			
AD-05-0566	DIAG 3/b	Diagnostic Tool		





# **PRO-SENS®**

The Titanus Pro-Sens® is designed for large applications with harsh environments with a wide range of accessories.

- ☐ Twin pipe aspirating system (2 channels) each with:
  - o Up to 300m of pipe length
  - Coverage of up to 2000m²
  - 1 Alarm output (Fire & Fault)
  - Up to 63 sampling holes
  - Modular Sensitivity
- □ LOGIC-SENS®
- □ Operating Temperatures 60° to -40° \*\* Standard -20°, Cold Store -40°
- ☐ Standard IP20 optional IP52
- □ PIPE-Guard patented airflow monitoring system sensing changes in the airflow from as little as =/- 10%
- Optional silent version for operating down to 23dB *once installed with* the **AD-10-1980** Sound Absorber/Muffler Unit on the exhaust of the unit.



### Versions available:

- □ Standard
- ☐ Cold Store (-40° operating temperature)
- □ Silent

#### The components



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

## **STANDARD & SILENT**

	Part no.	Туре	Device
	AD-05-0457	TP-1/a	Basic Device Pro Sens 1 alarm per detector
	AD-05-0458	TP-1-SL	Basic Device Pro Sens SILENT 1 alarm per detector

2	AD-10-5130	DM-TP-50-L	Detector Module f. ProSens & SILENT
	AD-10-5100	DM-TP-10-L	Detector Module f. Pro Sens & SILENT
	AD-10-5115	DM-TP-01-L	Detector Module f. Pro Sens & SILENT

3	AD-10-1035	FW-TP-1	Front Film TP-1 for 1 detector, Wagner Logo
	AD-10-1037	FW-TP-2	Front Film TP-2 for 2 detectors, Wagner Logo

#### **FREEZER**

4	Part no.	Туре	Device
	AD-05-0467	TP-1-F/a	Basic Device Pro Sens FREEZE 1 alarm per detector

	AD-10-5200	DM-TP-50-L-F	Detector Module f. Pro Sens FREEZE
2	AD-10-5190	DM-TP-10-L-F	Detector Module f. Pro Sens FREEZE
	AD-10-5195	DM-TP-01-L-F	Detector Module f. Pro Sens FREEZE

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3	AD-10-1035	FW-TP-1	Front Film TP-1 for 1 detector, Wagner Logo
	AD-10-1037	FW-TP-2	Front Film TP-2 for 2 detectors, Wagner Logo

## **FILTER**

AD-10-1975 LF-A	-AD-K Air	Filter Standard Fusion





# PRO-SENS NET® TP-4

The Titanus Pro-Sens *NET*® is designed for large applications with harsh environments with a wide range of accessories.

- ☐ Twin pipe aspirating system (2 channels) each with:
  - o Up to 300m of pipe length
  - Coverage of up to 2000m²
  - o 2 Alarm outputs (Pre Alarm, Main Alarm & Fault)
  - Up to 63 sampling holes
  - Modular Sensitivity

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Operating Temperatures 60° to -40°

\*\* Standard -20 °, Cold Store -40°

Standard IP20 optional IP52

□ PIPE-Guard patented airflow monitoring system sensing changes in the airflow from as little as =/- 10%

Optional silent version for operating down to 23dB *once installed with* the **AD-10-1980** Sound Absorber/Muffler Unit on the exhaust of the unit.

□ Optional Ethernet & Data logger

☐ Optional Remote Display

## Versions available:

- □ Standard
- ☐ Cold Store (-40° operating temperature)
- □ Silent

#### The components



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

## STANDARD





3	AD-10-1076 FW-TP-4		Front Film TP-4 for 1 detector 2 alarms Wagner Logo	
	AD-10-1077	FW-TP-5	Front Film TP-4 for 2 detector each 2 alarms Wagner Logo	

#### **FILTER**

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]	AD-10-1975	LF-AD-K	Air Filter Standard Fusion







# PRO-SENS NET® TP-5

The Titanus Pro-Sens *NET*® is designed for large applications with harsh environments with a wide range of accessories.

- ☐ Twin pipe aspirating system (2 channels) each with:
  - o Up to 300m of pipe length
  - Coverage of up to 2000m²
  - 3 Alarm outputs (Info Alarm, Pre Alarm, Main Alarm & Fault)
  - o Up to 63 sampling holes
  - Modular Sensitivity

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- Operating Temperatures 60° to -40° \*\* Standard -20°, Cold Store -40°
- Standard IP20 optional IP52
- □ PIPE-Guard patented airflow monitoring system sensing changes in the airflow from as little as =/- 10%
- □ Optional silent version for operating down to 23dB *once installed with* the **AD-10-1980** Sound Absorber/Muffler Unit on the exhaust of the unit.
- □ Optional Ethernet & Data logger
- ☐ Optional Remote Display



- □ Standard
- ☐ Cold Store (-40° operating temperature)
- □ Silent



# The components



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

#### **STANDARD**



Part no.	Туре	Device	
AD-05-0665	TP-5	Basic Device Pro Sens /net 3 alarm per detector (Info Alarm, Pre Alarm & main Alarm)	I

Part no.	Туре	Device
AD-05-0665	TP-5	Basic Device Pro Sens /net 3 alarm per detector (Info Alarm, Pre Alarm & main Alarm)
AD-10-5250	DM-TT-50-L	Detector Module TT f. Pro Sens/net & SILENT
AD-10-5210	DM-TT-10-L	Detector Module TT f. Pro Sens/net & SILENT
AD-10-5230	DM-TT-01-L	Detector Module TT f. Pro Sens/net & SILENT
AD-10-1165	FW-TP7	Front Film TP-5 for 1 detector each 3 alarms Wagner Logo
AD-10-1169	FW-TP8	Front Film TP-5 for 2 detector each 3 alarms Wagner Logo

#### **FILTER**

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1	AD-10-1975	LF-AD-K	Air Filter Standard Fusion	

\*\*SILENT & FREEZER as with PRO-SENS®





# **TOP-SENS®**

The Titanus Pro-Sens *NET*® is designed for large applications with harsh environments with a wide range of accessories.

- ☐ Twin pipe aspirating system (2 channels) each with:
  - o Up to 300m of pipe length
  - Coverage of up to 2000m²
  - 3 Alarm outputs (Info Alarm, Pre Alarm, Main Alarm & Fault)
  - Up to 63 sampling holes
  - Modular Sensitivity

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- Operating Temperatures 60° to -40° \*\* Standard -20°, Cold Store -40°
- Standard IP20 optional IP52
- □ PIPE-Guard patented airflow monitoring system sensing changes in the airflow from as little as =/- 10%
- □ Optional silent version for operating down to 23dB *once installed with* the **AD-10-1980** Sound Absorber/Muffler Unit on the exhaust of the unit.
- □ Optional Ethernet & Data logger
- ☐ Optional Remote Display
- ☐ Optional Smoke Graph Display

#### Versions available:

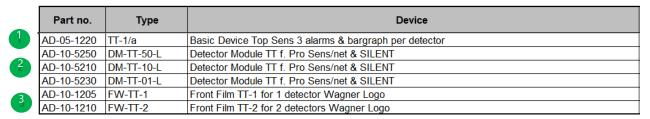
- □ Standard
- ☐ Cold Store (-40° operating temperature)
- □ Silent

### The components



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

#### **STANDARD**









# **RACK-SENS®**

The Titanus Rack-Sens® is designed for Fire protection in its most compact form for network cabinets, switch gear and server racks. Compact and space-saving, innovative technology with very little demands for space.

Especially designed for EDP cabinets, server racks and control cabinets, TITANUS RACK-SENS® presents an extremely cost-effective fire protection solution for 482,6 mm construction (19") cabinets and racks.



	Single	pipe	aspirating	system	with:
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- o Up to 15m of pipe length
- o Coverage of up to 150m<sup>2</sup>
- o 2 Alarm outputs (Pre Alarm, Main Alarm & Fault)
- o Up to 10 sampling holes
- Full compliance with sensitivity classes A, B & C
   in accordance with European standard EN54 part 20

LOGIC-SENS®
Operating Temperatures 0° to 80°
Standard IP20
Earliest possible detection by air sampling smoke detection
High immunity to false alarms due to intelligent
Interactive diagnostic tools allow interruption free maintenance
Future-proof and extendable due to high degree of modularity
Networkable via Ethernet for Visual®, snmp, Web interface, opc-server
Ultra-flat high-tech fire protection starting with 44,45 mm construction height (1u) and 482,6 mm
Construction (19") format

## Designed for:

Network cabinets and
Server racks
Telecommunication cabinets
Control switch cabinets
Low voltage cabinets

Ultra-flat high-tech fire protection starting with





# FAQ's:

#### 1. What's the smallest unit you have and what's the coverage?

The Micro-Sens is our smallest unit which can cover up to  $500m^2$  (50m) with up to 8 sampling holes. This is ideal for Lift Shafts or smaller systems. This has the option of Room Ident variant which can have up to 5 individual alarms with outputs for applications such as Holding Cells, Hotel Rooms etc.

This is the only one of the range that you require the Diagnostics tool for any of the versions to test, commission and maintain.

#### 2. What is the maximum coverage for a single detector?

The Fusion can cover up to 1,600m<sup>2</sup> per detector and the Pro-Sens range can cover up to 3,000m<sup>2</sup> per detector. Please refer to British Standards for maximum area of coverage (2,000m<sup>2</sup>). Each Unit can have two detectors with independent alarm outputs.

## 3. Do we need to install an filter inline with the system?

We recommend that a filter is installed with all systems as this will protect the detector, if maintained correctly. We have different filters depending on the microns.

### 4. I need more than one Alarm & Fault signal, is this possible?

Yes, if you do, you need either the Pro-Sens or Top-Sens

□ Pro-Sens Net **TP-4** - 2 Alarm levels per detector

□ Pro-Sens Net **TP-5** - 3 Alarm levels per detector

□ Top-Sens **TT-1a** - Top-Sens 3 Alarms & Bar graph per detector

## 5. This needs to be installed in an area where noise is an issue, do you have a quieter version?

Yes, our normal operating range is around 46dB, you can chose the silent version which once installed with the Sound Absorber/Muffler Unit (AD-10-1980) on the exhaust of the unit, will reduce the sound to 23dB. This is available across the range excluding the MICRO-SENS & RACK-SENS.

### 6. How long does an alarm stay in the memory of the system?

Each system normally holds any alarms in the memory which can be seen using the Diagnostics tools in conjunction with Diag 3 or Diag 4 for up to 72hrs after the event has cleared. If you need more than this, you will need a data logger which comes with the **NU-5-D** Network Card. This is only available on the Pro-Sens Net (TP-4 & TP5) & Top-Sens

# 7. Can you have a Bar Graph Display?

All of the ranges have the option for a Bar Graph Display. Please chose this option when designing your system.

#### 8. Are you able to remotely access the unit or network them together?

You can add the Network card along with the Data Logger (09-20-6445 NU-5-D) to the Pro-Sens (TP-4 & TP-5) Net/Top-Sens. If these are already on site, they can be added retrospectively. This isn't an option for the Micro-Sens, Fusion and Pro-Sens.

## 9. What is the lowest operating temperature as I need to cover a cold store/freezer?

Our range operates between 40° to -20° (or -30° on the Fusion). If you require it to go in a freezer, please use the cold store/freezer variant (where applicable) as this will give you an operating temperature down to -40°. Please note that with our systems, they are design to be installed within the freezer excluding the PSU & Battery. Please make sure the correct parts are uses, i.e. the freezer detector base and the detector module along with the freezer flow reducers and clips

#### 10. Are all hole apertures the same and how do we design the system?

The hoke apertures are defined by the design using our PipeXpress design software. Hole apertures vary from 2.0mm to 7.mm depending on each system. Please note that there is different flow reducers and clips for Deep Freeze Storage Areas.

## 11. Can you have manual or automatic purging on the Titanus Range?

Yes there is options for manual blow throughs along with several VSK Valves.

#### 12. I need to install a system within an ATEX rated area, do you have a solution for this?

Yes, you can add a detonation prevention device to cover Tye A, B or C depending on the application





# 13. What sensitivity of detector should I choose?

This depends on the design and category of Example:

**10** aspirating holes with

each sensitivity of **3.5** % **obs/m**. **3.5** % **obs/m**: **10** = **0.35** % **obs/m** 

Detector sensitivity must be  $10 \times 10 \times 10^{-5}$  and aspirating hole. Reason: Air dilution by fresh air intake of the other 9 aspirating holes.

