

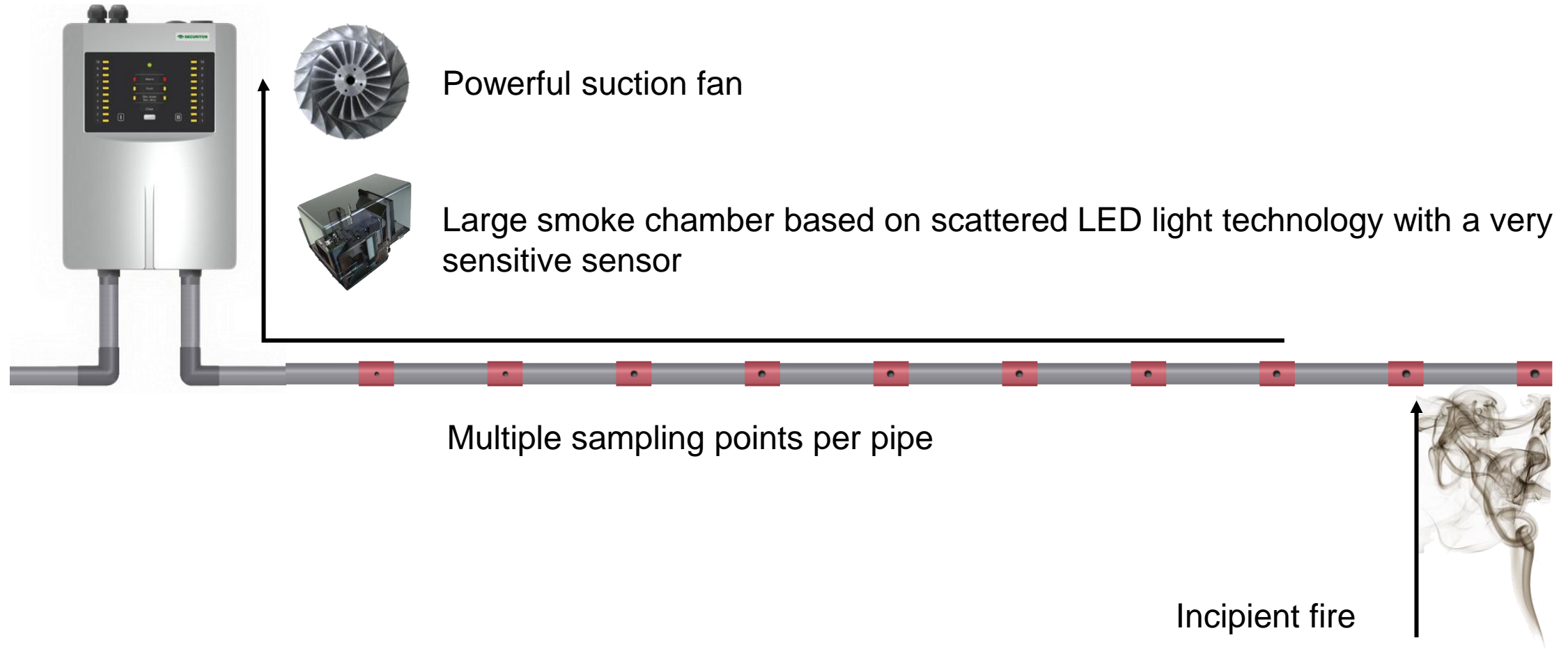


Very early warning aspirating
smoke detection.

SecuriSmoke ASD

How it Works

Air sucked through holes and tested for smoke at single point

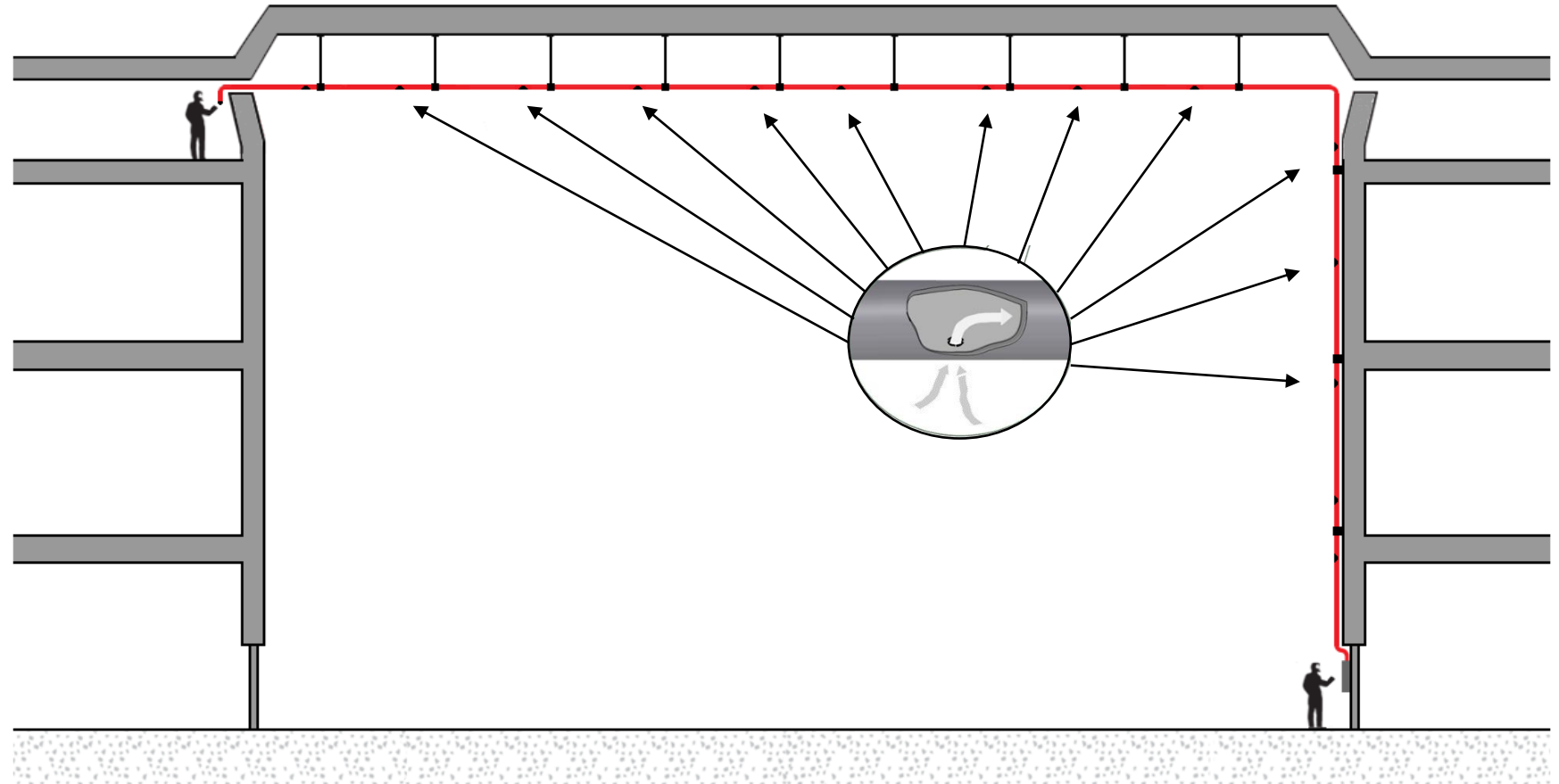


Aspirating smoke detection

Powerful device covers large space with many sampling points

ASD can cope with:

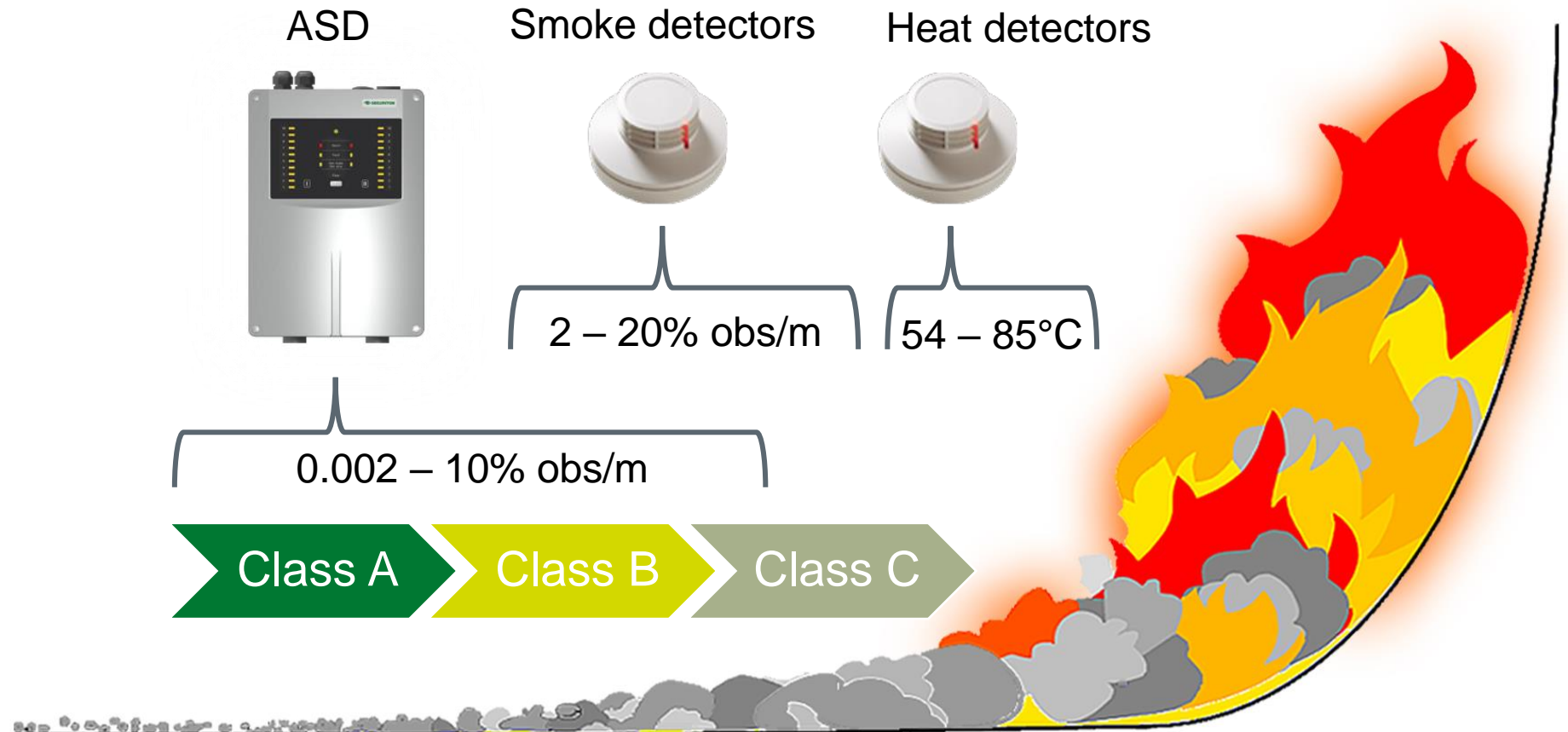
- ✓ Fast airflow
- ✓ Large spaces
- ✓ Dust
- ✓ Aggressive gases
- ✓ Extreme temperatures
- ✓ Radiation
- ✓ Magnetic Fields
- ✓ High Voltage
- ✓ Stratification
- ✓ ATEX applications



Very Early Warning Fire Detection

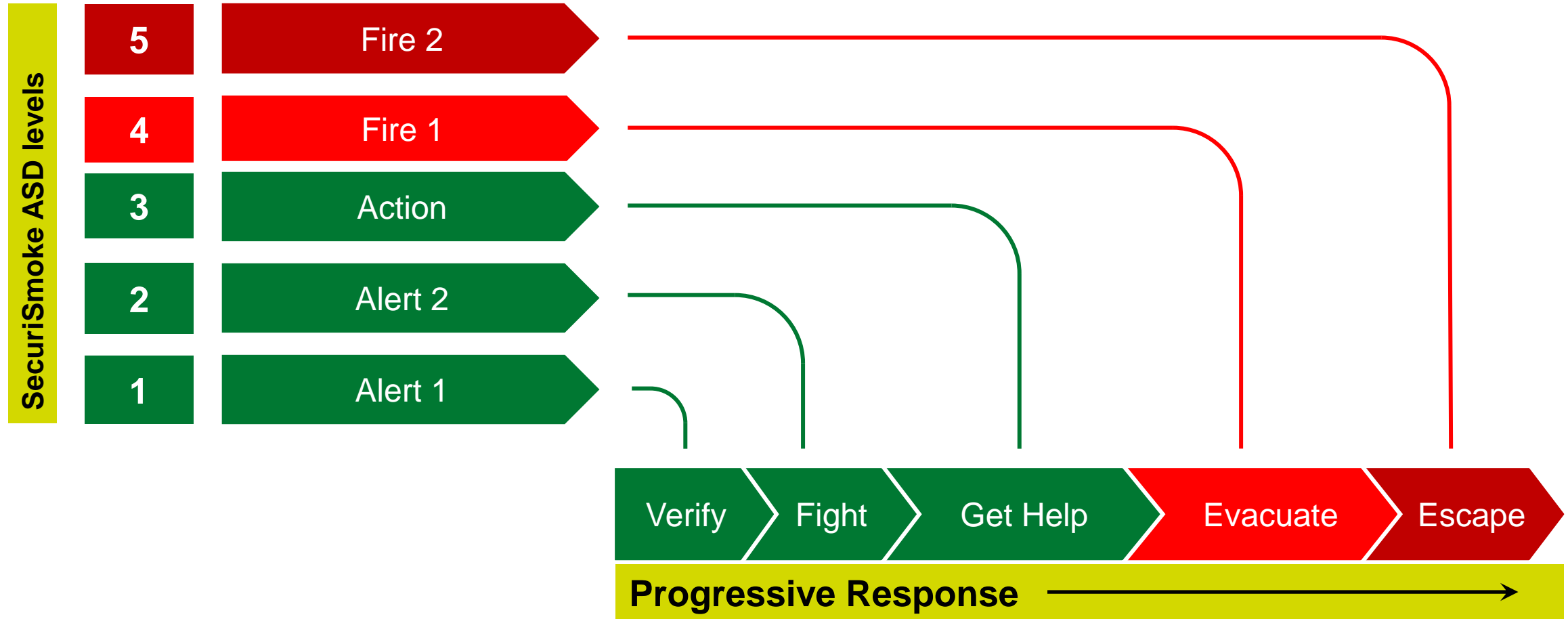
Catch incipient fires with ASD

Class A 0.002 – 0.8% obs/m (Very Early Warning)
Class B 0.8 – 2.0% obs/m (Early Warning)
Class C 2 – 10% obs/m



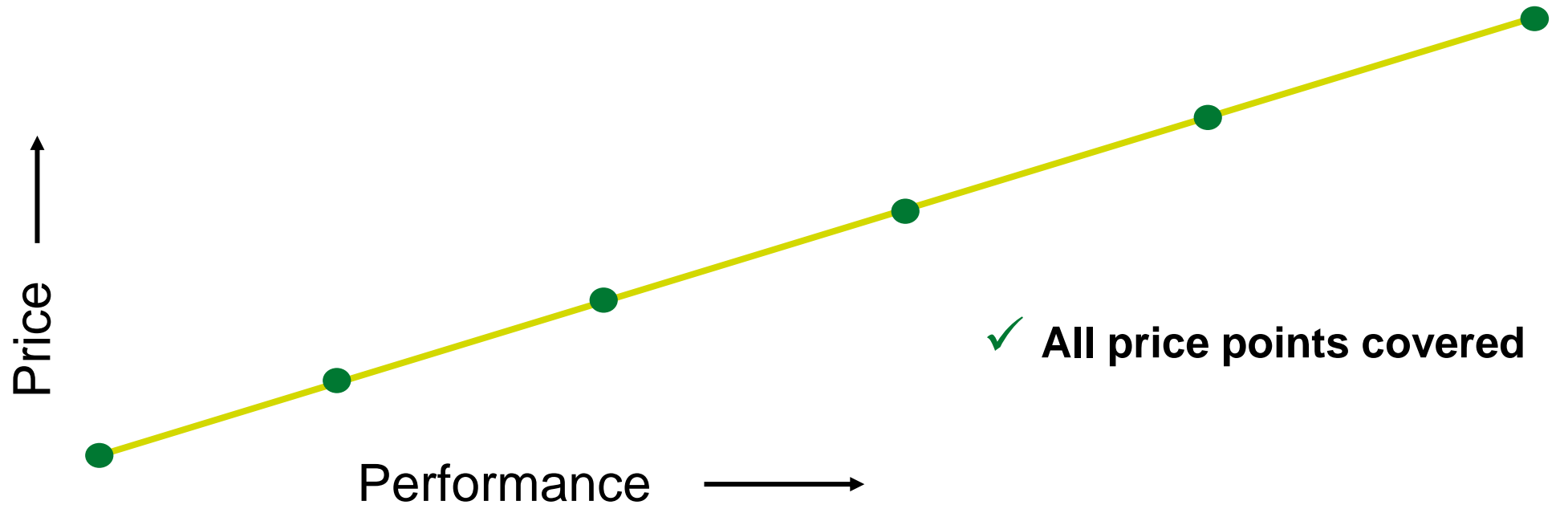
Progressive response

Appropriate action at every point





		ASD 531	ASD 532	ASD 533	ASD 535-1 /-3	ASD 535-2 /-4	ASD 535-3 /-4 HD
Sensors per Unit		1	1	1	1	2	1 or 2
Sensitivity	% obs/m	0.006	0.002	0.002	0.002	0.002	0.002
Sampling Points	Per Class A/B/C	6 / 8 / 12	8 / 12 / 16	16 / 50 / 50	18 / 56 / 120	36 / 112 / 240	36 / 112 / 240
Sampl. Pts/Branch	Per Class A/B/C	6 / 8 / 12	8 / 12 / 16	12 / 24 / 30	18 / 50 / 50	18 / 50 / 50	18 / 50 / 50
Aggr. Tube Length	m	75	120	200	300	2 x 300	2 x 300
Single Tube Length	m	40	70	80	110	2 x 110	2 x 110
Max. Area	m ²	720	1280	1920	2880	5760	5760
Operation Temp. Range	°C	-10 ... +55	-20 ... +60	-20 ... +60	-30 ... +60	-30 ... +60	-30 ... +60
IP Rating		IP54	IP54	IP54	IP54	IP54	IP66
Smoke Level Display		no	yes	no	no / yes	no / yes	yes





LED versus LASER

All SecuriSmoke ASD versions feature a high-powered LED as a light source

State-of-the-art technology

Higher temperature range

Longer service life

Lower cost



Extreme Temperature Range

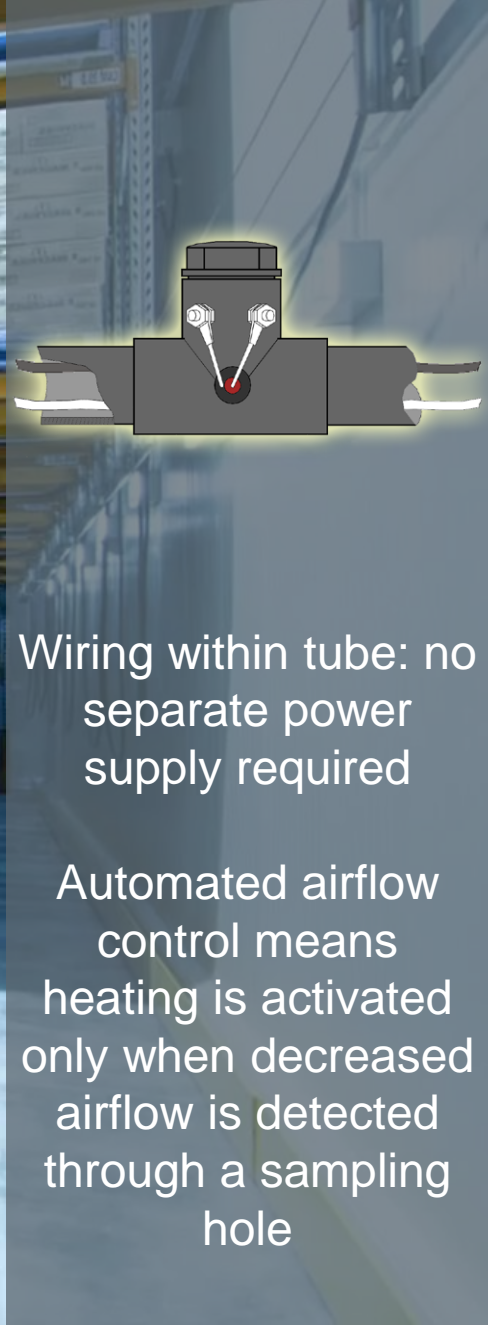
The ASD 535 can be mounted inside a deep freeze storage unit



-30°C



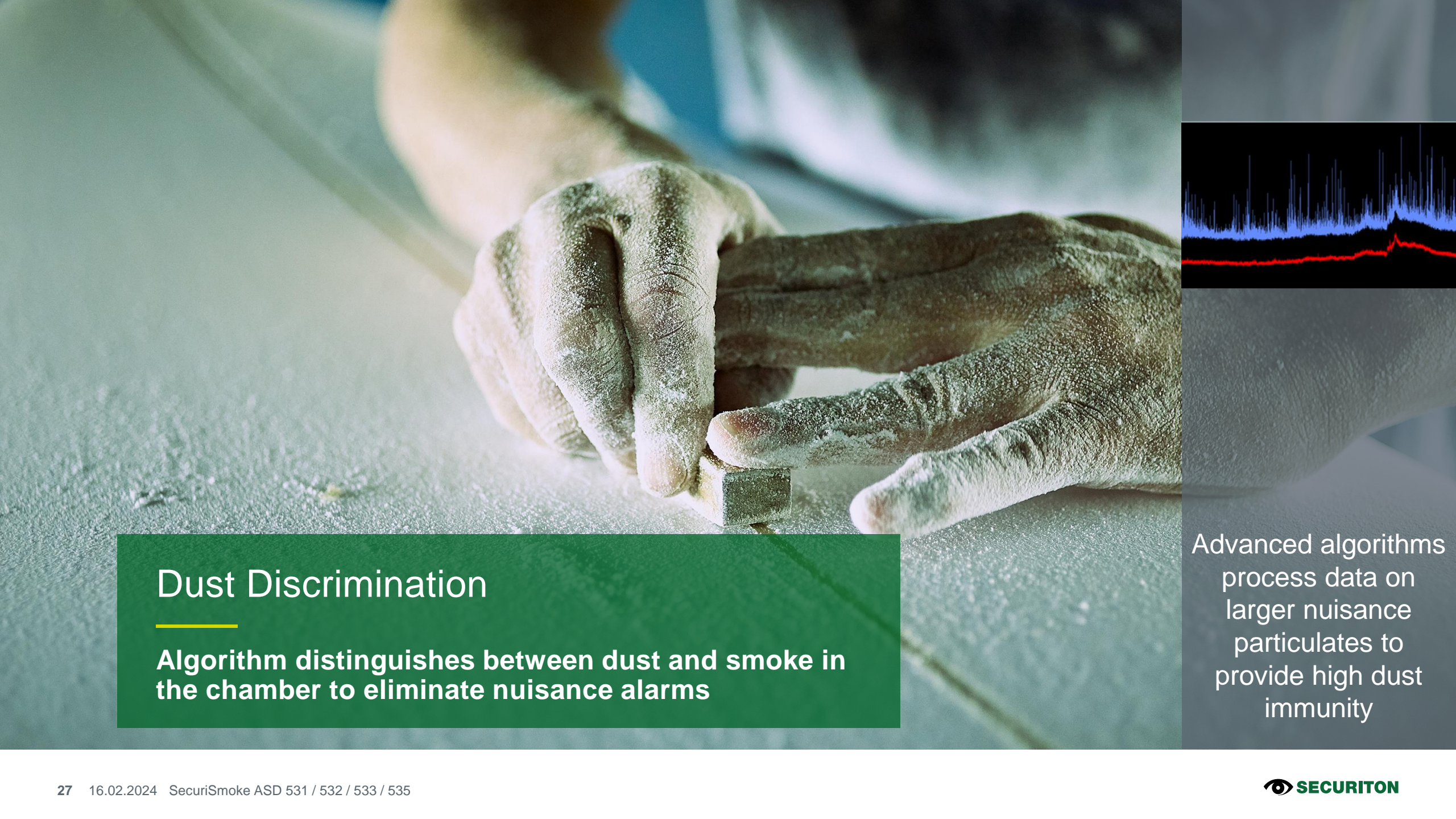
Operating temperature range of -30°C to +60°C



Heated Sampling Points
Highly efficient de-icing system for sampling holes

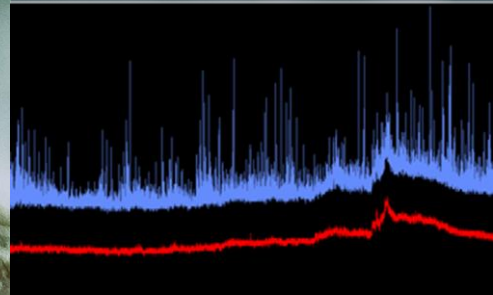
Wiring within tube: no separate power supply required

Automated airflow control means heating is activated only when decreased airflow is detected through a sampling hole

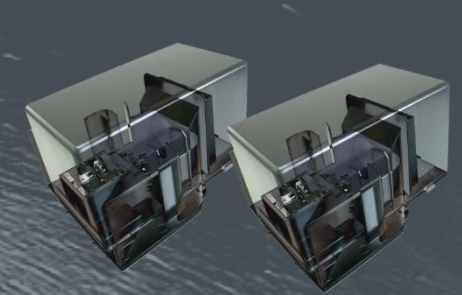


Dust Discrimination

Algorithm distinguishes between dust and smoke in the chamber to eliminate nuisance alarms



Advanced algorithms process data on larger nuisance particulates to provide high dust immunity



- 5 Fire 2
- 4 Fire 1
- 3 Action
- 2 Alert 2
- 1 Alert 1

Double Knock

Twin sensor chambers also allow for two-detector dependency

Two detector dependency for reliable triggering of automated extinguishing systems on chosen alert level



IP54 Class

IP66 Class

IP Rated and Splash-Proof
Even standard version can resist forces and water, HD version is tougher still

IP54 protection class for all standard ASD models

HD version is resistant to IP66 standard for hazardous areas

Simple set up

The sticker says it all – no training required for ASD 531



Commissioning

without PipeFlow calculation
(symmetric tube networks only)

1. Set number of holes (**Holes** switch)
2. Set standard/class (**Class** switch)
3. Initial reset (**Mode** switch on Pos. 0 + *confirm with **Set/Res** button)
4. Set ASD into normal operation (**Mode** switch on Pos. 1 + *confirm)
5. Function control (alarm & fault test)

***Optional**

6. Set airflow tolerance and delay
7. Set relay latching
8. Filter function On/Off
9. Change filter service life

with PipeFlow calculation
(asymmetric tube networks also)

1. Carry out PipeFlow calculation of planned project
2. Set sensitivity acc. calculation with **Holes** and **Class** switch (see table)
3. Initial reset (**Mode** switch on Pos. 0 + *confirm with **Set/Res** button)
4. Set ASD into normal operation + *confirm
5. Function control (alarm & fault test)

***Optional**

Control elements

Set/Res Button function

- Confirmation of position/function on mode switch
- Reset fault/alarm events

Holes Switch settings

Pos. 0: Default (delivery status, no function)
Pos. 1-C: Positions according no. of holes (A=10, C=12)

Class Switch settings

Pos. 0: Default (delivery status, no function)
Pos. 1: Sensitivity range 1
Pos. 2: Sensitivity range 2
Pos. 3: Sensitivity range 3
Pos. A: EN54-20 A/NFPA 75+76 v.e.w. (max. 6 holes), with dust filter
Pos. B: EN54-20 B/NFPA 75+76 e.w. (max. 8 holes), with dust filter
Pos. C: EN54-20 C/NFPA 72 (max. 12 holes), with dust filter
Pos. D: Like Pos. A, but without dust filter
Pos. E: Like Pos. B, but without dust filter
Pos. F: Like Pos. C, but without dust filter

Mode Switch settings

Pos. 0: Initial reset (delivery status)
Pos. 1: Normal operation
Pos. 2: Isolate (alarm outputs blocked, for tests)
Pos. 3: Fault test (3x **Set/Res** button)
Pos. 4: Presignal test (3x **Set/Res** button)
Pos. 5: Alarm test (3x **Set/Res** button)
Pos. 6: Log off extension modules
Pos. 7: ASD off (fan/smoke sensor)
Pos. 8: - Filter function On/Off (**Set/Res** button for 10s)
- Filter replacement (1x **Set/Res** button)
Pos. 9: - Read out filter service life (1x **Set/Res** button)
- Change filter service life (1x **Set/Res** button per 2 mo.)

Alarm Sensitivity Table

FW 01.02.xx

Set sensitivity Holes & Class switch	Sensitivity range 1 (Class switch pos. 1)	Sensitivity range 2 (Class switch pos. 2)	Sensitivity range 3 (Class switch pos. 3)
1	10.000	1.202	0.144
2	8.683	1.044	0.125
3	7.539	0.906	0.109
4	6.546	0.787	0.095
5	5.684	0.683	0.082
6	4.935	0.593	0.071
7	4.285	0.515	0.062
8	3.721	0.447	0.054
9	3.231	0.388	0.047
A	2.805	0.337	0.041
B	2.436	0.293	0.035
C	2.115	0.254	0.031
D	1.836	0.221	0.027
E	1.630	0.192	0.023
F	1.384	0.166	0.020

Airflow Bargraph

● AF+ (fault)

↑ Positive deviation

● OK 100% (initial reset)

↓ Negative deviation

● AF- (fault)

Airflow DIP switch settings

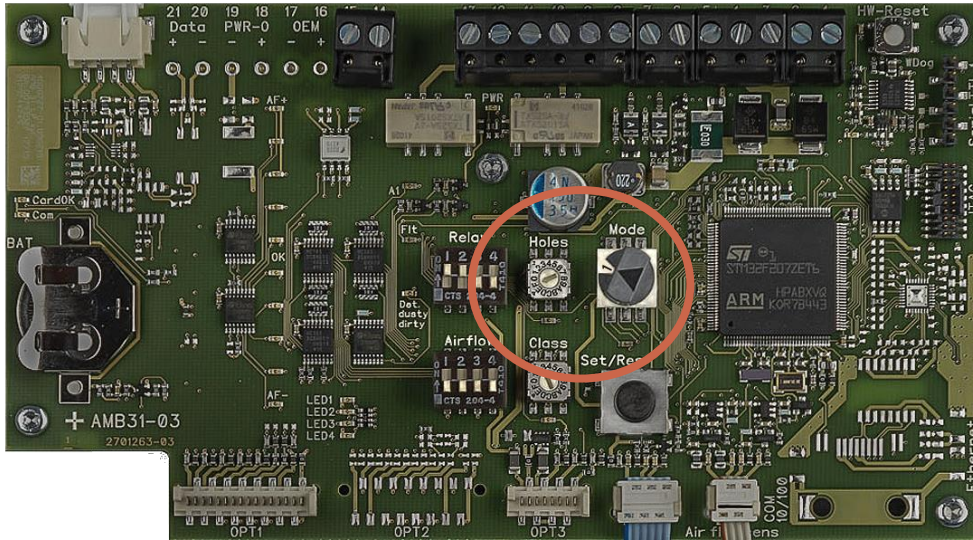
Relay DIP switch sett

<http://www.securiton.com/en/manuals/>

www.securiton.com/en/manuals

Simple set up

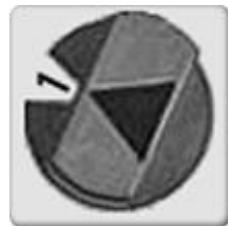
Set just 3 switches with ASD 531



✓ Select Holes



✓ Select Class

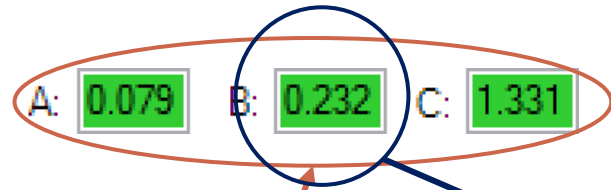


✓ Select Mode

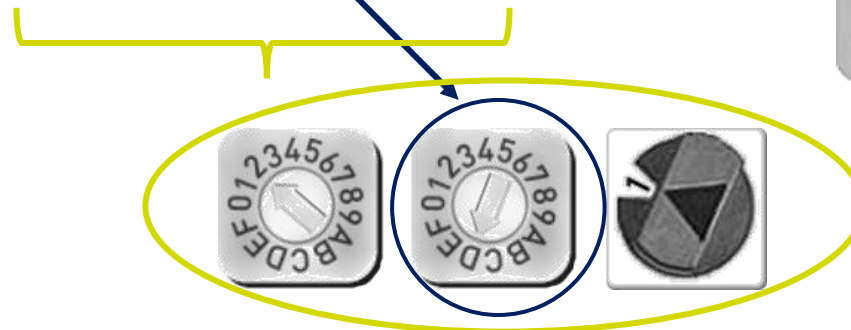
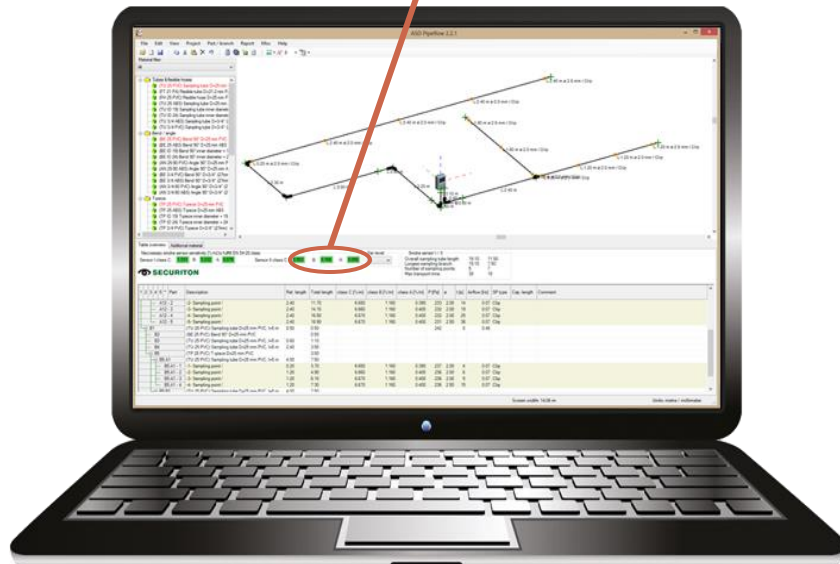


Simple Set Up

PipeFlow can be used for designs with ASD 531



Holes switch	Class switch pos. 1	Class switch pos. 2	Class switch pos. 3
1	10.000	1.202	0.144
2	8.683	1.044	0.125
3	7.539	0.906	0.109
4	6.546	0.787	0.095
5	5.684	0.683	0.082
6	4.935	0.593	0.071
7	4.285	0.515	0.082
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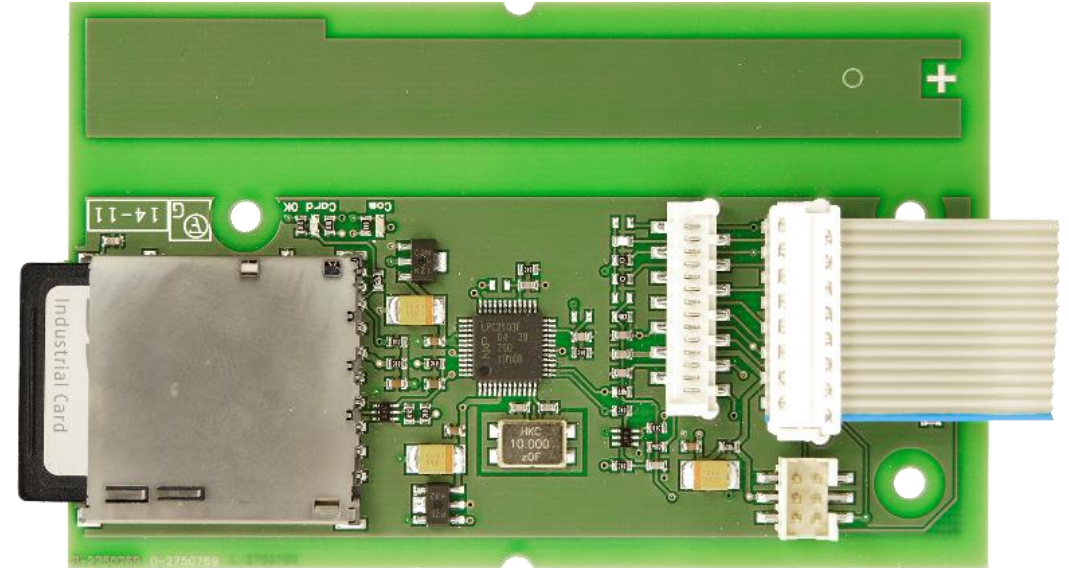


Massive event memory

Data storage options for all ASD devices



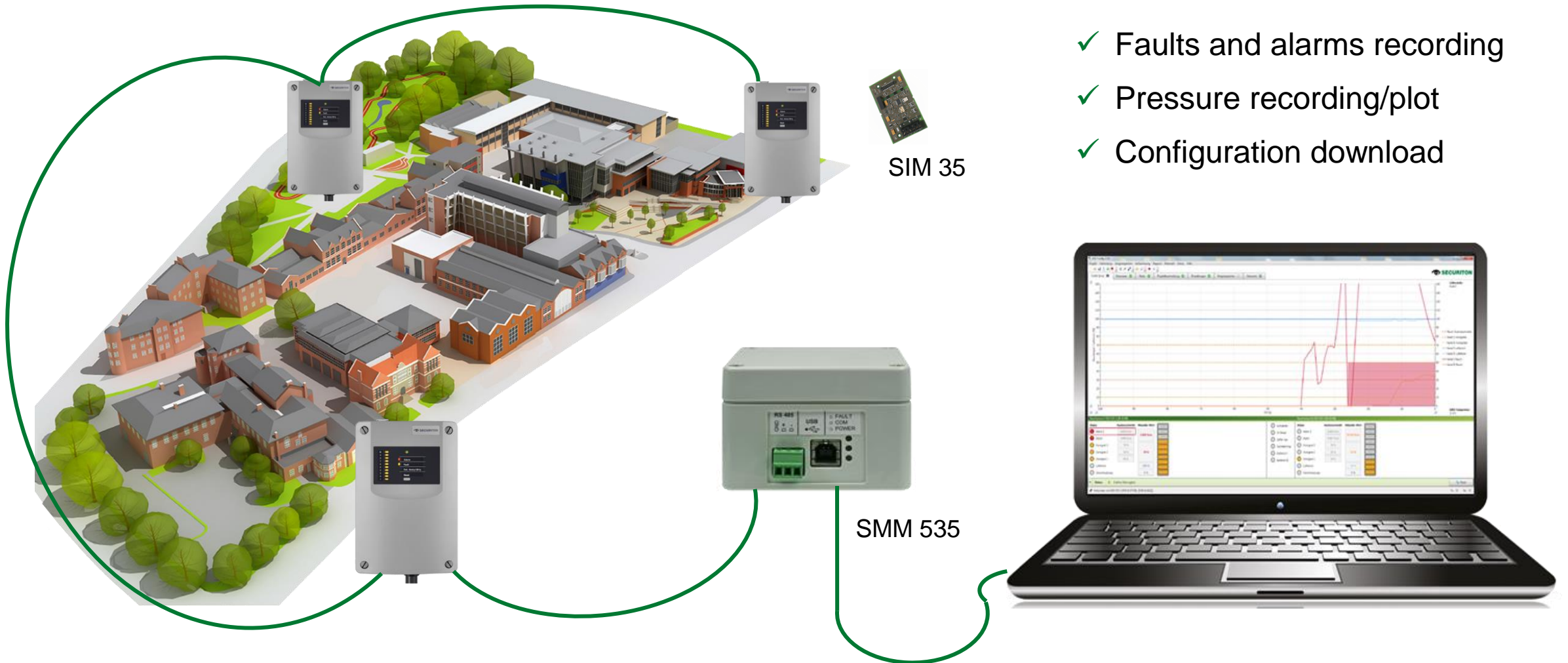
- ✓ Built-in SD port
- ✓ 83-day memory of smoke levels and airflow values
- ✓ Record up to 640'000 events including Alarms, Faults, Interventions and Timestamps



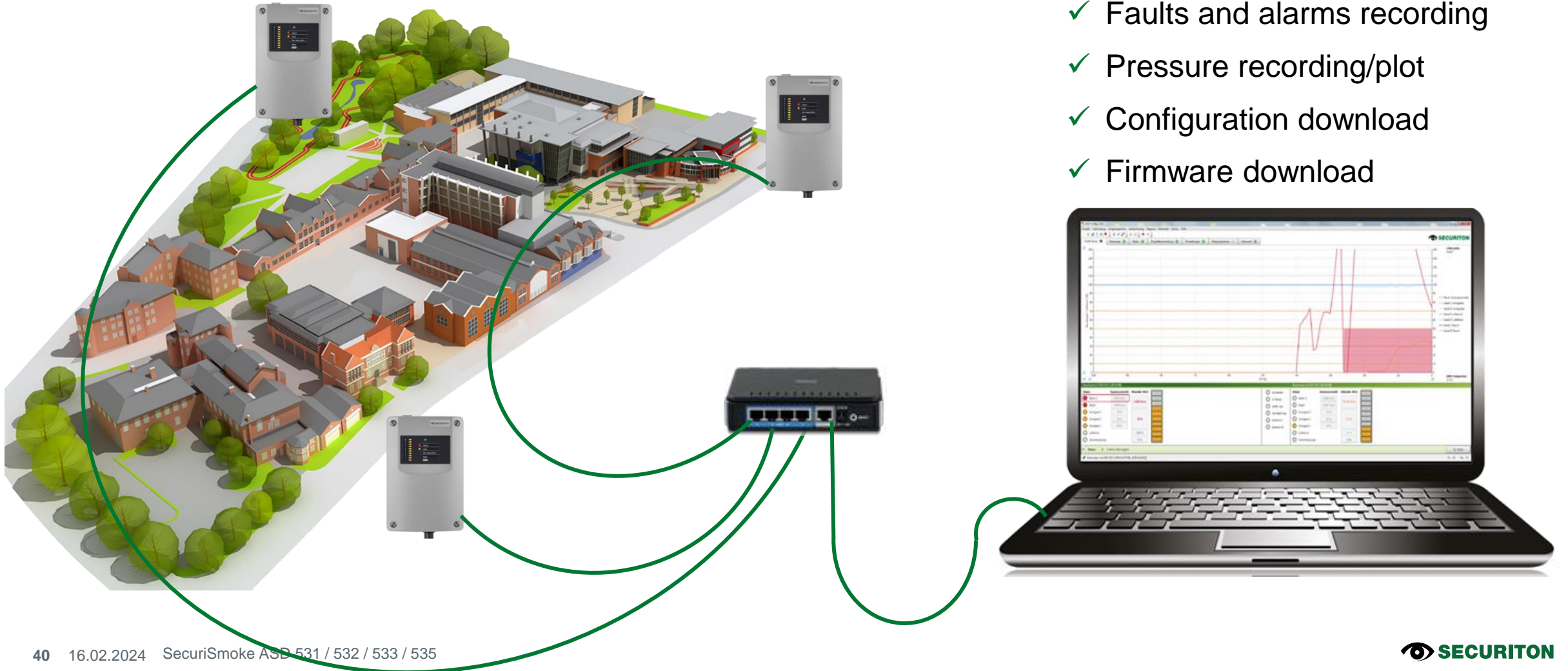
- ✓ Built-in memory with MCM 35
- ✓ 83-day memory of smoke levels and airflow values
- ✓ Memory Card Module lets you trace up to 16 Million events

Easy networking and remote configuration

Link up to 250 units over 1'000 m with RS485



Factory-ready networking with ASD 532 LAN network with TCP/IP to your desk



- ✓ Faults and alarms recording
- ✓ Pressure recording/plot
- ✓ Configuration download
- ✓ Firmware download

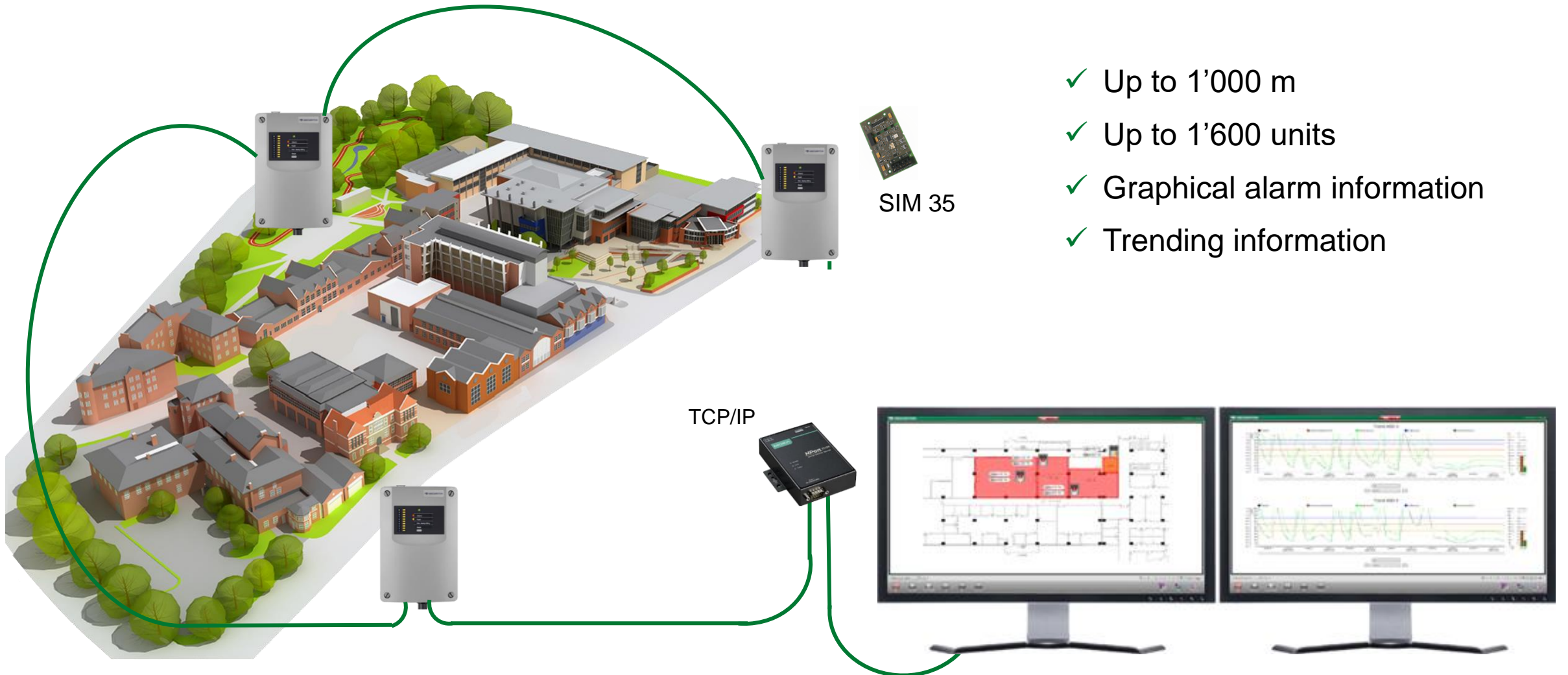
Factory-ready networking

Fire alarm loop with SecuriLine

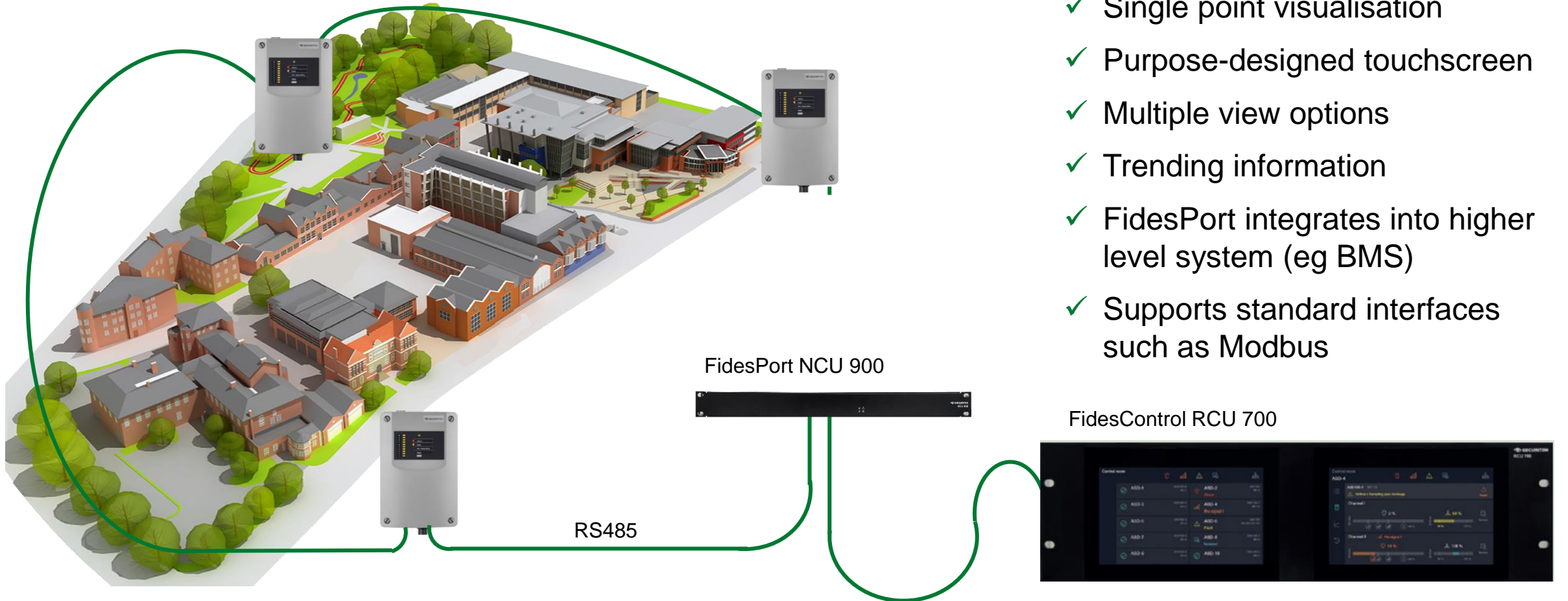


Location-based graphical visualisation

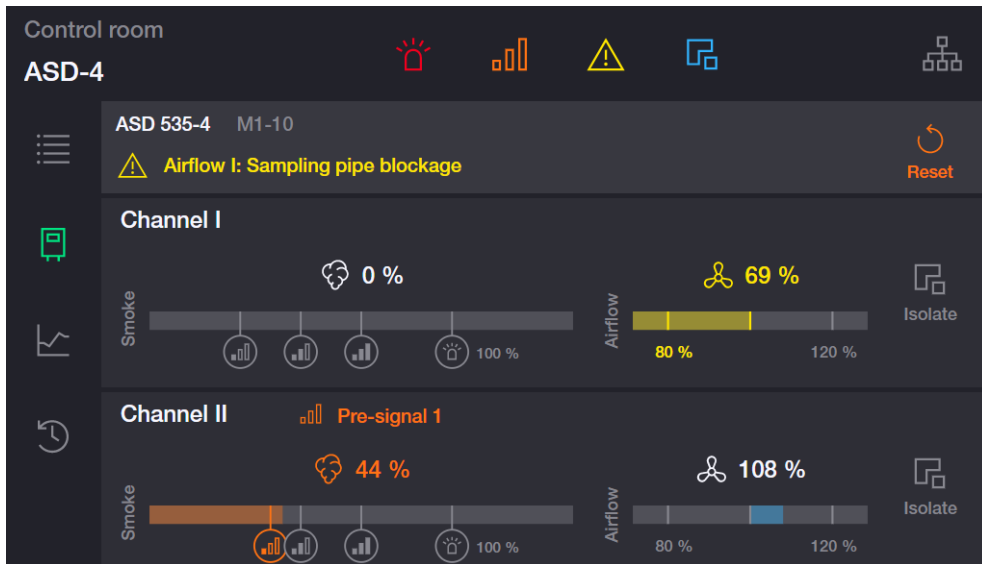
Office-ready LAN network with TCP/IP



Factory-ready networking FidesNet



New FidesControl RCU 700



Control room

✓ ASD-1	ASD 535-4 M1-1	⚠️ ASD-2	ASD 532 M1-8 Alarm
✓ ASD-3	ASD 535-4 M1-2	📊 ASD-4	ASD 535-4 M1-10 Pre-signal 1
✓ ASD-5	ASD 535-4 M1-4	⚠️ ASD-6	ASD 532 169.254.100.102 Fault
✓ ASD-7	ASD 535-4 M1-6	🔒 ASD-8	ASD 535-2 M1-9 Isolated
✓ ASD-9	ASD 535-4 M1-5	✓ ASD-10	ASD 535-4 M1-7

View everything on a 7-inch touchscreen

- ✓ All of the ASD detectors on a FidesNet can be visualized and operated from a single point
- ✓ The RCU 700 remote control unit displays everything on an elegant 7-inch touchscreen
- ✓ The intuitive user guidance results in the best possible user experience
- ✓ Up to 100 units over 1km covered

Remote Control Unit



RCU-1
ASD 1

Type	Date	Time	Origin	Event
⚠	04.08.2018	16:36:01	System	Fan: Tacho signal lacking
ⓘ	04.08.2018	16:35:32	System	Test triggering via PC program: Test pre-signal 3
📊	03.08.2018	11:22:37	Channel I	Smoke sensor I: Pre-Signal 2
📊	03.08.2018	11:22:01	Channel I	Smoke sensor I: Pre-Signal 1
⏸	03.08.2018	11:17:16	Channel I	Smoke sensor I: Isolate switched off
⚠	03.08.2018	11:15:19	Channel I	Smoke sensor I: Isolate switched on
ⓘ	31.07.2018	16:31:48	Channel I	Test triggering via PC program: Test pre-signal 2
⏸	30.07.2018	14:02:16	Channel I	Smoke sensor I: Isolate switched off

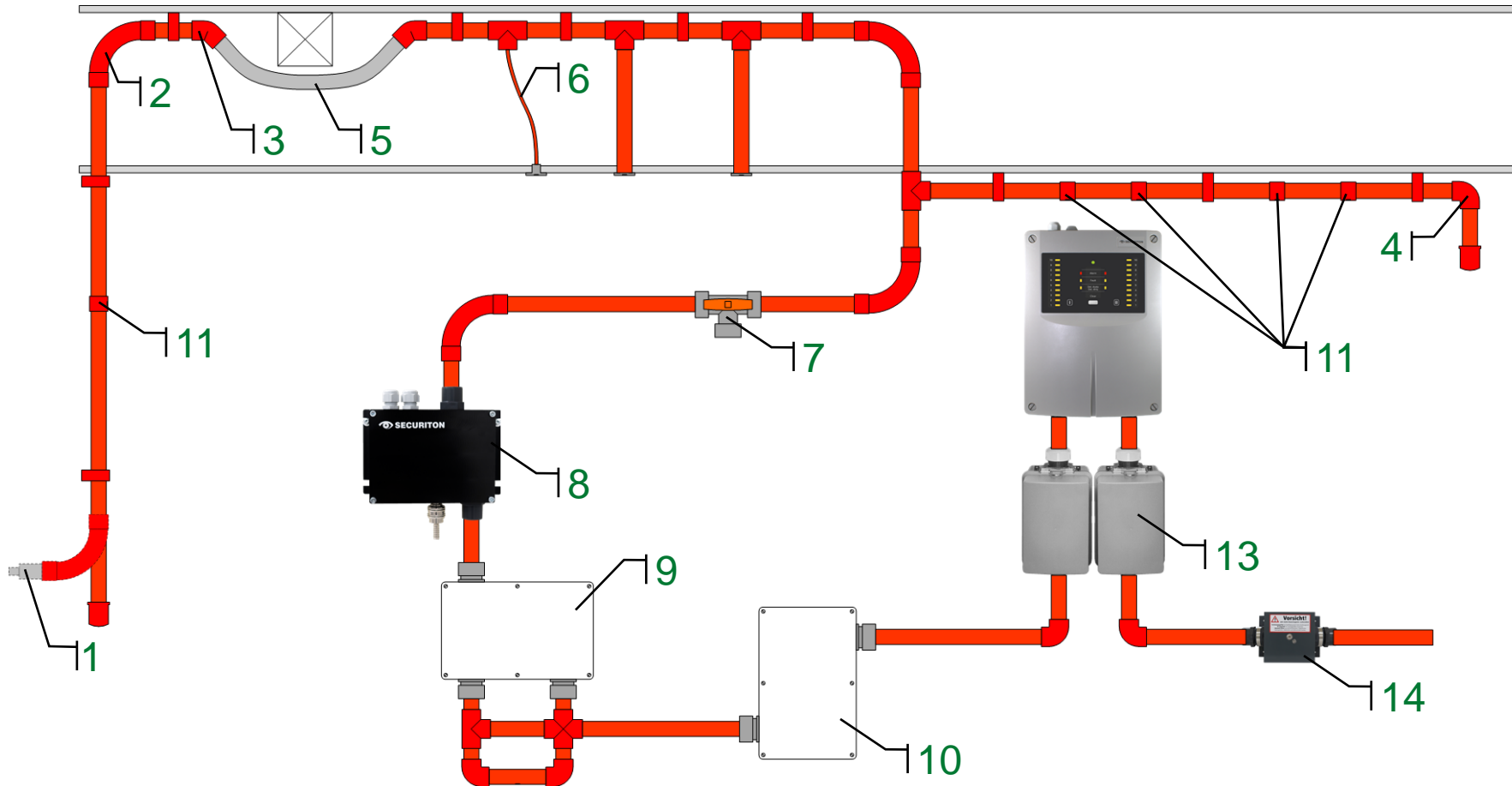
RCU-1
ASD-1
Airflow monitoring window
Range: 0 - 70 % (0 = Off)
Channel I
Positive 20 %
Negative 20 %
Cancel ✓
Dust / Dirt threshold
Logout
1 2 3
4 5 6
7 8 9
X 0

Multiple screens for ultimate overview

- ✓ Device list
- ✓ Dashboard
- ✓ Trending of smoke and airflow
- ✓ Events
- ✓ REK
- ✓ Programmer

Accessories

Portfolio of tubing and accessories

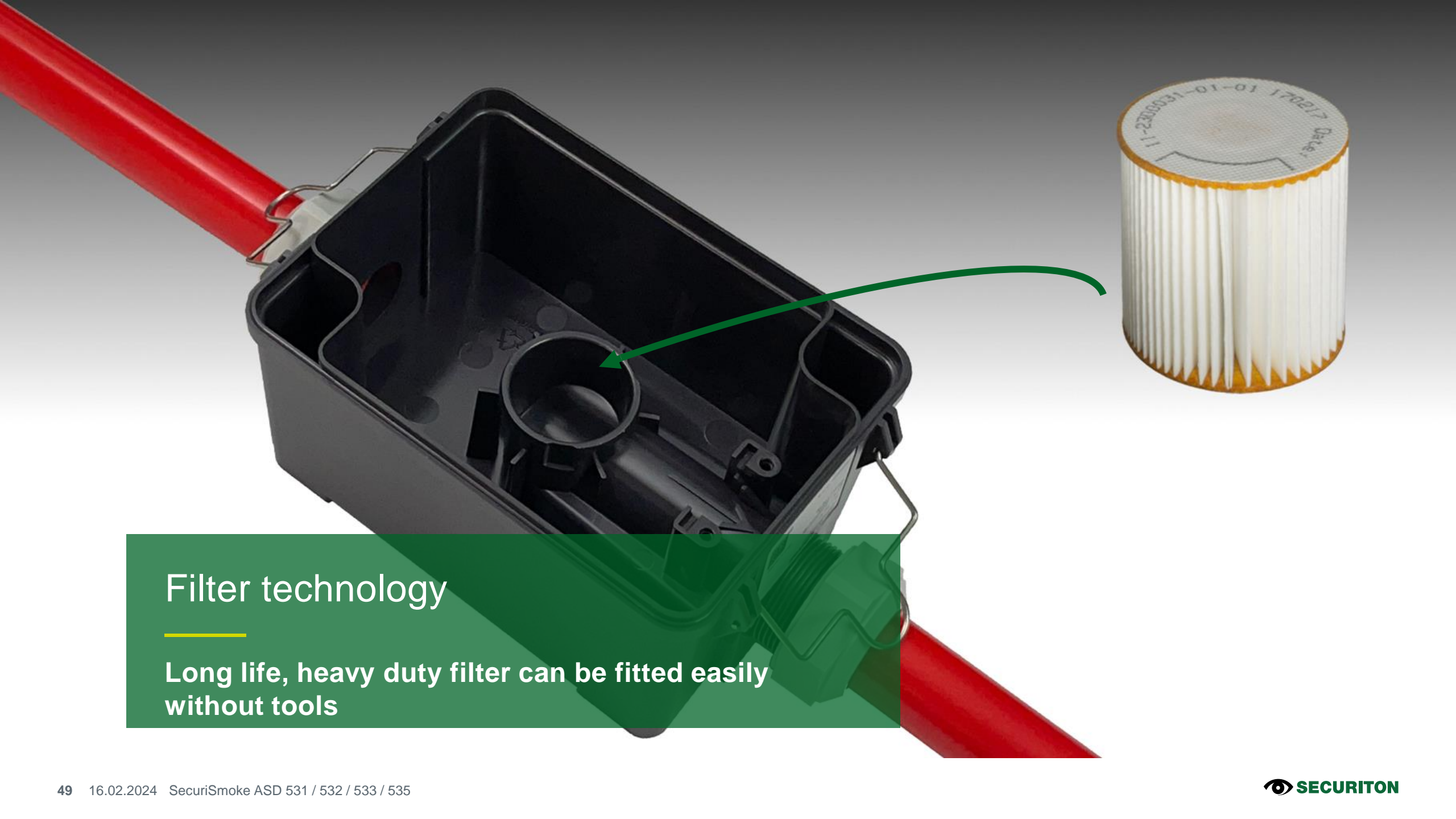


1. Pressurised air inlet
2. 90° Bend
3. 45° Angle
4. 90° Angle
5. Flex Tube
6. Flex Capillary
7. Manual ball point
8. Automatic blowout device
9. Water retaining box
10. Dirt trap box
11. Sampling points
12. Test point
13. Dust filters
14. Magnetic filter



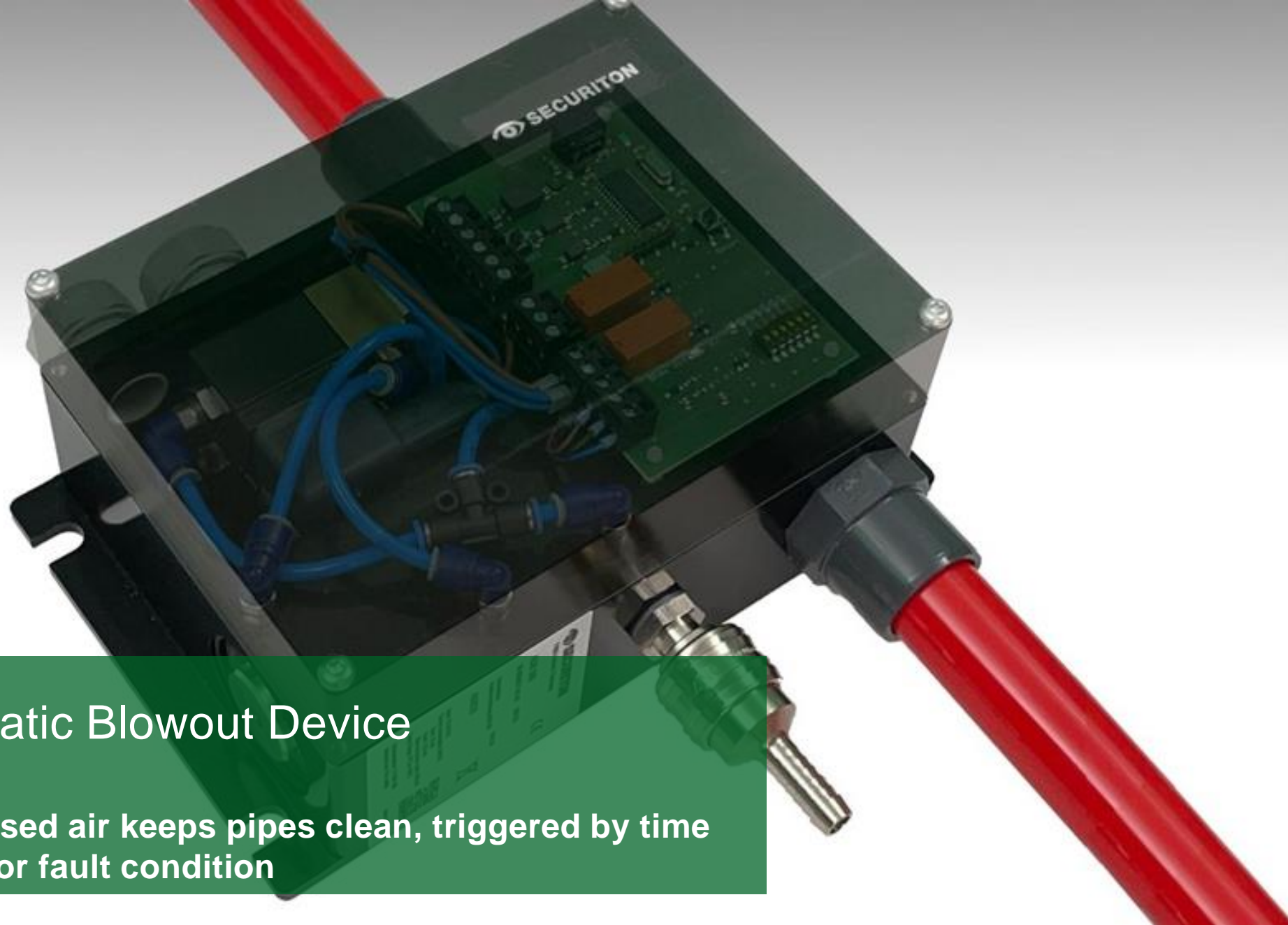
Pipes and Fittings

Vast range of accessories for all pipe layouts and installation requirements.



Filter technology

Long life, heavy duty filter can be fitted easily without tools



Automatic Blowout Device

Pressurised air keeps pipes clean, triggered by time interval or fault condition

In Tube Detection with REK 511



Channel identification capability for ASD

- ✓ REK pinpoints the branch of a pipe where smoke is present
- ✓ Relay output, indicator and Class A sensitivity
- ✓ Choice of detector sensitivity: SSD 515-1S for 1.2% or SSD 515-3S for 0.3%



Multichannel ASD

4 and 8-channel options for large tube networks can include channel identification capability