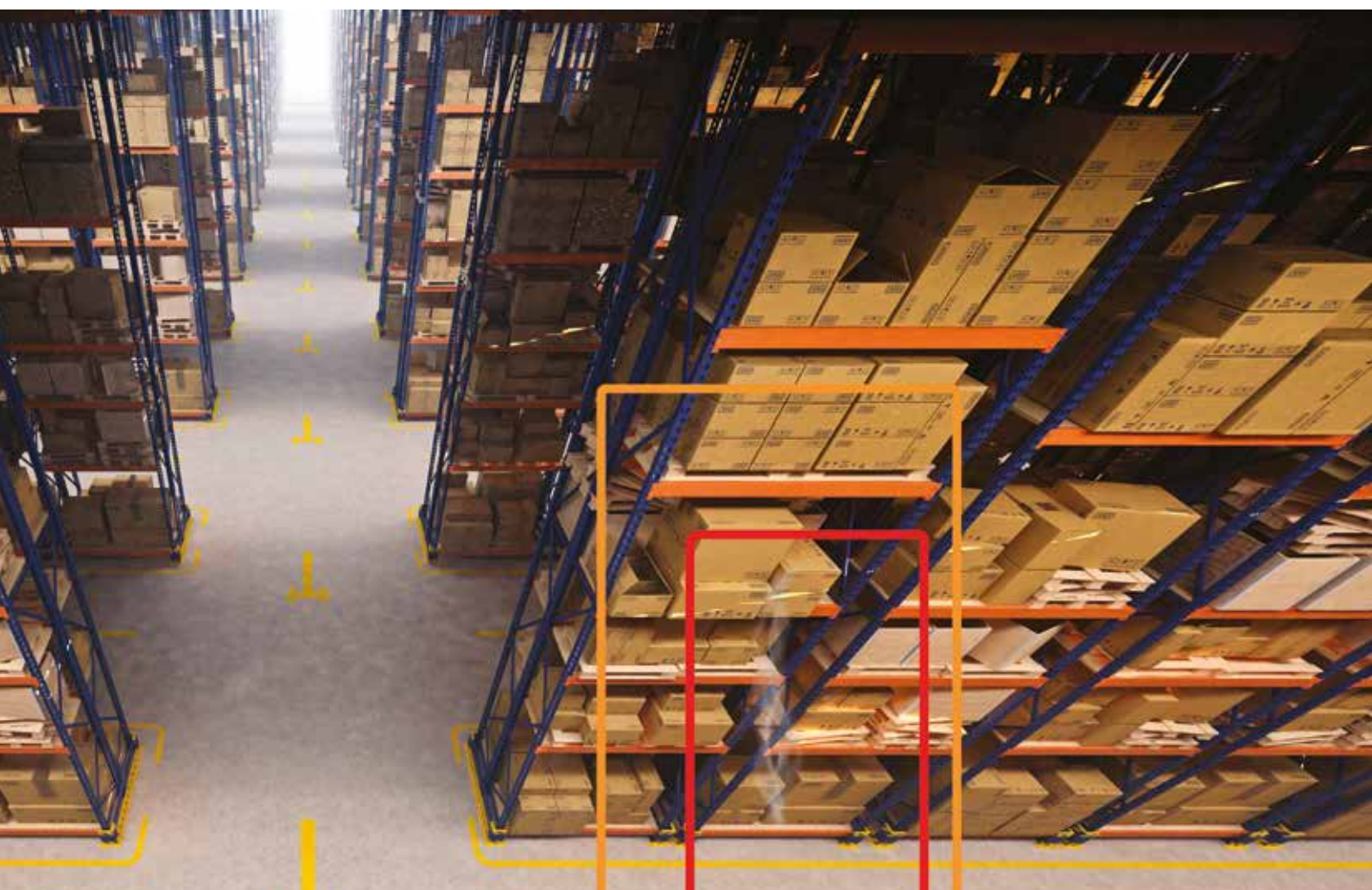




---

**VIDEO SMOKE  
DETECTION  
FOR CRITICAL  
ENVIRONMENTS**





---

SmokeCatcher is a reliable early warning system for smoke detection in critical indoor environments. Adding the proven and tested SmokeCatcher video analytics to your visual security camera enables you to detect smoke superfast. This is especially the case in places where traditional smoke detection systems fail due to slow detection or too many false alarms.

---

# SMOKECATCHER SEES IT FIRST



## FOR HARSH ENVIRONMENTS

SmokeCatcher works flawlessly in environments where chemicals, dust or vapor are present every day. Unlike traditional smoke detection systems, SmokeCatcher does not generate false alarms because of these phenomena.



## FOR HIGH-IMPACT & HIGH-RISK ENVIRONMENTS

Even a small fire can have big consequences, both in high-impact (e.g. power plants, airplane hangars) and high-risk environments (e.g. chemical plants). Traditional smoke detectors might only get activated when the damage is already done.

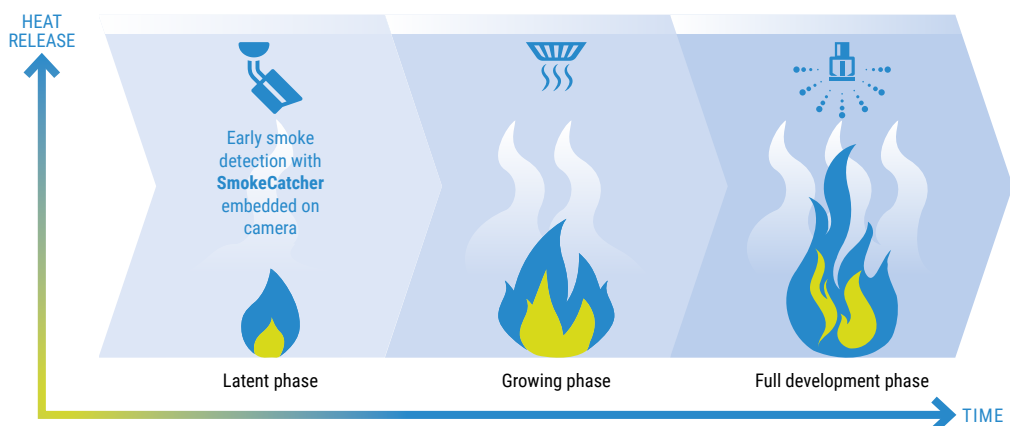


## FOR GREAT HEIGHTS

SmokeCatcher is ideal for use in tall buildings or large indoor spaces. In these environments, smoke might never reach your traditional smoke detector, because of a process called stratification, which stops the upward movement of smoke.

## SUPERFAST SMOKE DETECTION

---



# YOUR BENEFITS

---

## LOW FALSE ALARM RATE

Many traditional smoke detection technologies suffer from high false alarm rates, which can be very costly for your organization. Because SmokeCatcher detects smoke based on visual camera information, the false alarm rate is kept extremely low.

## FAST DETECTION

SmokeCatcher does not need to make physical contact with smoke. The system can actually see starting smoke fumes from large distances. This saves many valuable seconds, which can be used to take action before a major incident happens.

## VISUAL VERIFICATION

SmokeCatcher makes time-consuming inspection rounds to the smoke source unnecessary, because operators immediately see when and where it happens on their CCTV systems. Recordings of incidents can also be used afterwards for evidence gathering or analysis.

## RELIABLE DETECTION

SmokeCatcher video analytics have been developed and fine-tuned based on a vast video database. Our video archive is continuously expanding with customer material, which improves our analytics even more and enables us to cope with a growing number of environments and requirements.

## EDGE-BASED ANALYTICS & STORAGE

SmokeCatcher video analytics are fully integrated into your security camera, not installed on a server. This means that there's no single point of failure in your security network. Also, your video stream does not need to travel across your network, so it does not eat up your bandwidth.

## REAL-TIME HEALTH CHECKS

SmokeCatcher has a real-time self-test functionality, which enables the device to generate a notification when it is out of order or when detection is impossible, e.g. when the view is obstructed. An additional 'Operational Signal' will ascertain the operator that the algorithm is active and functioning properly.

# WHAT'S INCLUDED IN SMOKECATCHER?

---

## SMART SOFTWARE

A software license is the core of your SmokeCatcher solution. The SmokeCatcher algorithm continuously scans the environment and analyzes it in real time to exactly locate the incident.

## SEAMLESS INTEGRATION

Araani and its partners offer a smooth integration of SmokeCatcher with your existing devices and systems, including LAN, VMS or Fire Alarm Control Panel.

## FANATICAL SUPPORT

Araani's highly skilled integration partners are your first line of support. Whenever needed, our Araani experts are always at the ready to help you out with additional support.

## A HIGH-PERFORMANCE CAMERA

SmokeCatcher comes as a high-performance Axis camera, with Araani software fully pre-installed.

## ROCK-SOLID CERTIFICATION

SmokeCatcher is a state-of-the-art solution, ahead of legislation. However, Araani offers a Certification Protocol to bridge the gap between technology and legislation.

# FLEXIBLE INTEGRATION

SmokeCatcher easily integrates into your existing fire installation via our dedicated interface module, and also connects seamlessly with your VMS or BMS (Milestone, SeeTec, Genetec, etc.).

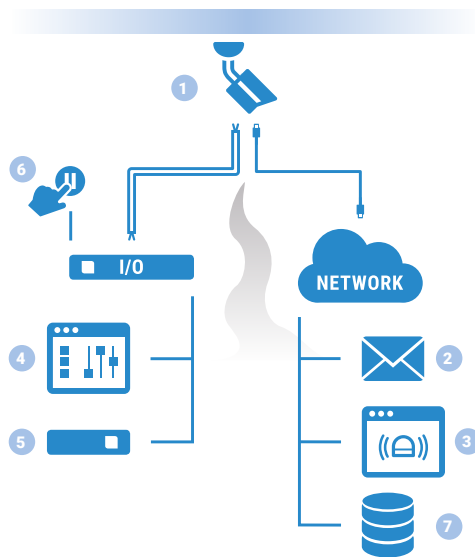
## DETECTION

### 1 SMOKECATCHER ALGORITHM

- **Embedded self-test:**
  - 15 lux
  - Sufficient background detail
  - Lens in focus.
- **4 outputs:**
  - Fault
  - Operational
  - Pre-smoke
  - Smoke.
- **Keep alive signal**

### 1 CAMERA

See Axis camera compatibility list.



## ALARM OUTPUT

### NETWORK

- **2 The camera can send an e-mail notification about the SmokeCatcher status, including pre- and post-event video recording:**
  - Operational
  - Fault
  - Pre-smoke
  - Smoke.
- **3 SmokeCatcher Bridge plug-in enables integration into any VMS/BMS:**
  - Alarm notification
  - Bounding boxes
  - Event recording
  - Communication fault signal
  - Sound notification
  - E-mail notification.

### I/O

Via an Interface Module, the digital I/O's of the camera are converted into hard contacts.

### 4 FIRE CONTROL PANEL

- **Output: SmokeCatcher status:**
  - Operational
  - Fault
  - Pre-smoke
  - Smoke.
- **Output: hardware/software status (health check):**
  - Power failure
  - Loss of keep-alive signal.

**5 PLC:** The interface module has 4 outputs can be sent to any PLC in order to activate rotating beacons, alarm signals, etc.

**6 CUSTOMIZED INPUTS** e.g. temporary de-activation for lens cleaning.

## STORAGE

- **1** SD card in camera
- **7** NVR
- **3** VMS/BMS.

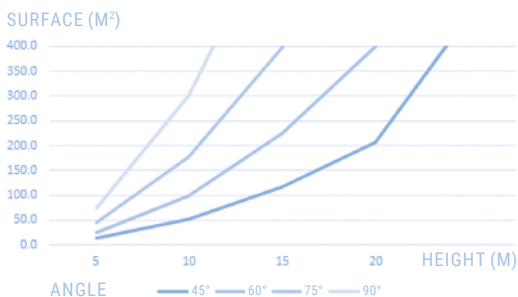
# TECHNICAL REQUIREMENTS

For the best SmokeCatcher performance, the following technical requirements should be taken into account:

- A minimum of 15 lux of light should be present.
- SmokeCatcher should be installed indoors or in a roofed area, in order to minimize the effect of various types of weather conditions.
- SmokeCatcher software is intended for use on fixed cameras only. PTZ cameras cannot be used in combination with SmokeCatcher software.
- The coverable surface of the camera depends on the lens type (opening angle of 45°, 60°, 75° or 90°) and installation height. In order to avoid blind spots, the different cameras' fields of view should sufficiently overlap. The cameras should also cover the surrounding walls for at least 3m high.



## COVERABLE CAMERA SURFACE





## ABOUT ARAANI

---

Founded in 2014, Araani is a Belgian high-tech company, specialized in video analytics for people, property and process protection. Araani is the developer of SmokeCatcher, the company's advanced video smoke detection solution that has been designed to guarantee business continuity and fire safety for companies that operate in critical and demanding environments.

## CONTACT

---

### **Araani NV - Headquarters**

Luipaardstraat 12  
8500 Kortrijk, Belgium  
tel: +32 (0) 56 49 93 94  
info@araani.com

### **Araani NV - UK & Ireland**

20, Ethel Road  
Leicester, LE5 5NA, United Kingdom  
tel: +44 (0) 7825 017255  
info@araani.com

### **Araani NV - France**

135, Avenue Roger Salengro  
59100 Roubaix, France  
tel: +33 (0) 650 30 42 35  
info@araani.com

Specifications are subject to change without prior notice.  
©Copyright 2017, Araani NV. All other brand and product names are trademarks of their respective owners. Images are for illustrative purposes only. (Created 03/2017)

Get convinced.  
Ask a demo now at [www.araani.com/demo](http://www.araani.com/demo)

**SmokeCatcher<sup>®</sup>**  
by **ARAANI<sup>®</sup>**