



Flame & Smoke Detection System

Reliable Vision-based Analytics System
for Early Warning in Wide-open Area

huperLab Flame & Smoke Detection System is an intelligent vision-based analytics system which incorporates patented vision algorithm technology and tested and fine-tuned detection cameras to promptly capture an image and verify flames and smoke within seconds via push event notification on mobile devices. It's a reliable solution to be applied in wide-open space and long-distance monitoring against the limitations of traditional fire alarm detectors.

Key Features

- Prompt Vision-based Flame and Smoke Detection
- Reliable Fire Alarm System against False Alarms
- Wide-open Space and Long Distance Monitoring
- Early Warning and Quick Response
- Push Video Notification Support on iOS/Android Devices in Seconds

Applications

- Automated factories and warehouses
- Flammable goods storage places
- Accommodation facilities
- Entertainment venues
- Museums and culture heritages
- Offices and buildings

Features & Benefits

Real-time Visual Detection & Recording

- Live monitoring and video recording
- Record video footage and prior event recording to be presented as the forensic evidence

Wide-open and Long Distance Coverage

- No additional sensor or equipment required
- Low limits to the ceiling height or sensor angle

Reliable Early Detection Against False Alarms

- Fast analyze and verify fire and smoke from its irregular shape, color changes and swaying motion within seconds
- Detect suspicious flame or smoke in high-resolution video for clearer image processing

Easy to Install & Integrate with Fire Safety Equipment

- Ideal to integrate with the alarms and sensors or other I/O devices
- Early response prior to fire and smoke detector trigger

Comprehensive Alert Notification

- Trigger I/O devices or PTZ camera to preset position when events detected
- Instant push video notifications to iOS/Android smartphones and tablets

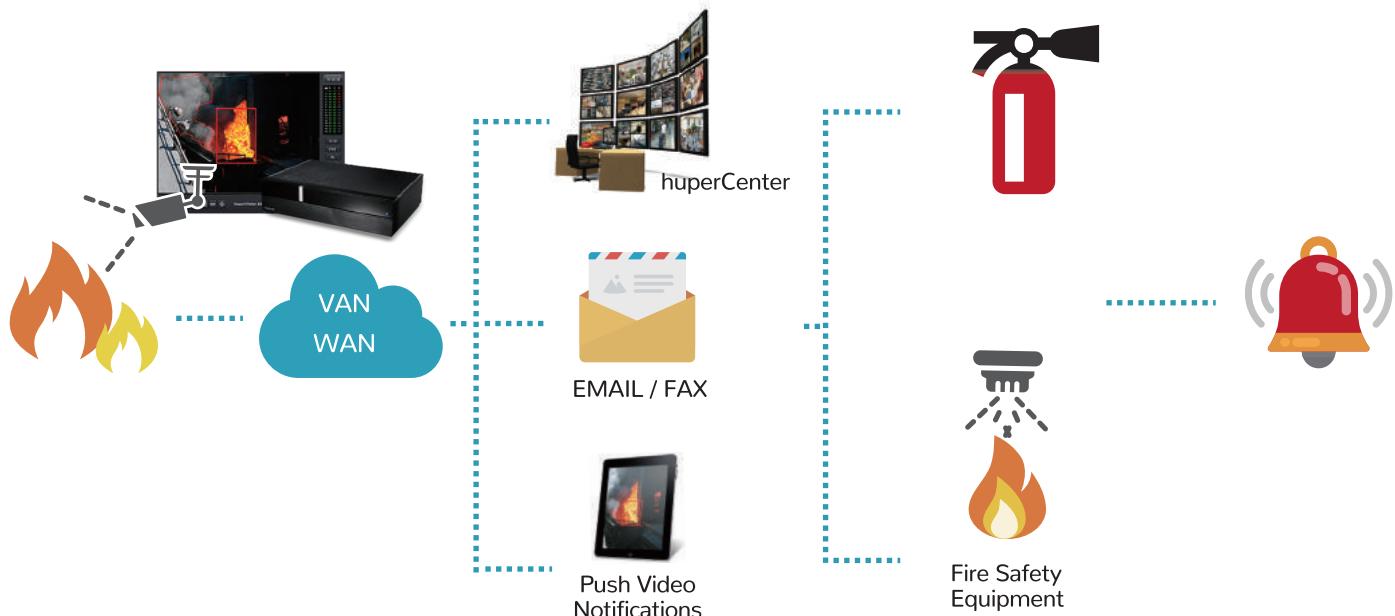
System Diagram

Flame/Smoke Video Analytics System

Instant Notifications

Quick Response

Early Warning



Camera Options	Digital Camera	Analog Camera
Product Models	HC-D220CS HC-D225AZ	HC-A001AZ
Image Sensor	Sony 1/2.8" Mega Pixel CMOS Image Sensor	Sony 1/4" 1/4-inch CCD Image Sensor
TV System	—	NTSC / PAL
Scan Format	1920x1080@30fps, 1920x1080@25fps, 1920x1080@60fps, 1920x1080@50fps	—
Scanning System	Progressive scan	Interlaced scan
Resolution	800 TVL (CVBS)	520 TVL
Video Format	HD-SDI : 1080p30, 1080p25, 1080i60, 1080i50, 720p60, 720p50, 720p30, 720p25	D1: 720x480 / 720x576
Minimum Illumination	0.02lx	0.07lx
Signal to Noise Ratio	52dB (Max)	52dB (Max)
Day & Night Mode	Auto / Color / B&W / External	Auto / Color / B&W
White Balance	AUTO / ATW / AWB (One Push)	AUTO / ATW / AWB (One Push)
Digital Wide	Off / Low / Mid / High	—
Dynamic Range	Off / Low / Mid / High	—
Auto Exposure	1/30(25) to 1/30000 sec.	1/60(1/50) to 1/120000 sec.
Video Output	Digital HD-SDI	Composite & Y/C output 1.0Vp-p at 75 ohm
Lens	f5-50mm Auto IRIS CS mount Lens	Built-in 20X Auto Zoom Lens
Operation Temperature	-10°C ~ 50°C	-10°C ~ 50°C
Storage Temperature	-30°C ~ 70°C	—
Humidity	80% Max	85% Max
Power Source	DC+12V / 3.24W	DC+12V / 3.6W
Dimensions	120 mm (L) X 60 mm (W) X 80 mm (H)	170mm (L) X 70 mm (W) X 80 mm (H)
		120 mm (L) X 60 mm (W) X 80 mm (H)