

ASDES ADDRESSABLE ASPIRATOR SMOKE DETECTION SYSTEM

The **ASDES Addressable Aspirator Smoke Detection System** is engineered for early and reliable smoke detection in critical environments. Designed for continuous air sampling, the system draws air through a dedicated pipe network and analyzes it using advance detection technology to identify smoke particles at the earliest stage.

ASDES provides dependable protection for high-risk and high-value applications where rapid detection is essential. Its intelligent monitoring capabilities help reduce false alarms while ensuring fast identification of genuine fire threats.

The system supports continuous airflow and pipe monitoring, multi-level alarm sensitivity, event logging, and communication with building management or monitoring systems through available output interfaces. Its touchscreen user interface provides clear system status, alarm indication, and simplified operation for maintenance and response teams.

With scalable design, robust performance, and advanced aspirating smoke detection features, **ASDES** delivers dependable early warning protection for industrial, commercial, marine, offshore, and specialized applications. Based on the uploaded datasheet content.



Areas of Use	Feature and benefits
- Offshore Platforms	- Built-in network capabilities for integration with additional panels control system
- AI Data centres	- Inbuilt airflow sensing and obstruction monitoring
- Oil and Gas	- Event logging with up to 16,000 records.
- Residential & Commercial	- Internationally certified
- Chemical Plants	- Multiple programmable outputs and relay interfaces
- Other Industrial Applications	- Patented protocol with enhanced reliability and false alarm avoidance
- Hospitality	- Highly scalable and modular, backward compatible.



Wide Area Coverage

The FACPES Addressable Fire Alarm Panel offers exceptional scalability with the capability to support up to 12 loops. Each loop can connect up to 254 addressable devices, enabling comprehensive coverage across extensive facilities.

Obscuration Monitoring & Pipe Auto Clean

The ES-Rapid addressable protocol is designed to provide the fastest response time, assigning unique addresses to each device on a loop. This enables the panel to pinpoint the exact location of an alarm, enhancing response efficiency.

UL Certified

The FACPES Addressable Fire Alarm Panel is UL certified, meeting rigorous safety and performance standards established by Underwriters Laboratories (UL). This certification ensures that the panel has undergone comprehensive testing for reliability, durability, and fire safety performance.

Extremely High Sensitivity

The FACPES seamlessly integrates with various building management systems (BMS), emergency communication systems (ECS), and remote monitoring services, enhancing overall safety and efficiency. This capability allows for centralized monitoring, timely alerts, and automated responses during emergencies, ensuring that all systems work together to protect occupants and streamline operations. The panel has multiple outputs which communicate via RS-485 (Modbus) & Ethernet.



Specification

Specification	
Input Voltage	85/265VAC (~ 60/50 Hz)
Detector Communication Protocol	ES-Rapid©
Coverage Area	to 2000m2/ 5760 m3 (max)
Aux Power Supply (Output)	1 No's - 24 VDC (18-32 VDC)
Power Consumption	<11W (Normal)/ <12W(Alarm)
Piping & Sampling	
Class A	- <120 meters - 36 holes per pipe
Class B	- <200 meters - 112 holes per pipe
Class C	- Up to 300 meters - 120 holes per channel
Pipe Material	CPVC/UPVC
Number of inlet & outlet pipes	2 No's Inlet 2 No's Outlet
Pipe Size & Diameter	Variable
Pump	High Capacity Sampling Pump
Auto Pipe Cleaning	Inbuilt
Obscuration Monitoring	In Flow Sensing
Detection	
Detection Method	Aspirating
Particle Size Detection	0.005-20 µm
Filter System	Multi Stage Intelligent
Auto Calibration	Inbuilt
Clean Air Reference	Continuous
Alarm Levels	3 Levels
Alarm Sensitivity	0.005%-20.0% obs/m
Fault Monitoring	Continuous Inbuilt
Contamination/Maintenance Prediction	Inbuilt
Alarm Delay	Yes (per channel)
Serial Communication & Outputs:	
Sounder (NAC) Output	2 programmable outputs
Auxiliary Relay	3 Programmable outputs (Fire, Fault, Supervisory)
RS-485 (Modbus)	1 No
Ethernet/Bacnet Ports	1 No
USB Ports	1 No
Digital Inputs	2 No's (Supervised)
User Interface, Indication & Tools:	
Display	7" Touchscreen
LED	5 high intensity LEDs
Smoke Level Indication	Yes
Operational Software (PC)	ESP Operator - Used for operation and live monitoring of controller and related equipment. Used during live panel operation.
Design Software (PC)	ESP ASD Builder - Used for designing the layout of the smoke detection system in accordance to panel capabilities and safety norms. Utilized during the design stages
Events Log	Up to 16000 events

Mechanical Characteristics	
Color	Red/Black/Silver
IP Rating	- IP54 - IP66***
Enclosure Material	- ABS - Aluminium
Vibration Resistance	-
Shock Resistance	-
Dimensions	
Weight	
Knockouts	22 mm - 18 (Top), 18 (Bottom), 4 (Left) and 4 (Right)

*** Marked items are options that are available upon request

Certifications



UL 864 (10th Edition)
Control Units and
Accessories for Fire Alarm
Systems
