Air Sampling Smoke Detection



Notifier by Honeywell:
Data Sheet

NOTIFIER®
by Honeywell

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The Notifier by Honeywell range of air sampling smoke detection systems (ASSD) comprises smoke detectors that actively take air samples from the monitored area and analyse them for the presence of smoke particles. This active sampling technology enables the identification of a possible fire in its very earliest stages from just 1 gram of material combustion.

Features

- Early fire detection thanks to innovative, highly sensitive HPLS light source technology
- High degree of false alarm immunity through LOGIC·SENS fire pattern recognition
- Up to 3 alarm thresholds for a tiered alarm concept
- Optional smoke level display in bar graph form
- A broad range of accessories, approved to EN 54-20
- High degree of modularity for a customised, cost effective solution
- Reliable project design with just 5 mouse clicks using PipeXpress planning software
- Time saving commissioning through Plug & Play
- Double-knock detection to enable separate room and equipment monitoring

The ASD range

The range comprises 3 detector units providing comprehensive solutions for a wide range of applications.

HI-SPEC ASD

HI-SPEC ASD serves a wide range of applications with the highest specifications. The system has a 3-stage alarm system and a smoke level display in bar graph form. It provides a complete solution with smoke level visualisation for up to 560 m pipe length for monitoring large areas.

ALL-SPEC ASD

ALL-SPEC ASD is a universal air sampling device for a broad range of applications. The high degree of modularity of the device makes it possible to achieve a highly adaptable, cost-effective solution.

COMPACT ASD

The COMPACT ASD air sampling smoke detection system is a cost-effective solution for monitoring small to medium-sized spaces and equipment. It is ideal for applications where larger air sampling smoke detection systems would not be cost-effective or in situations that require individual room identification.

This document is not intended to be used for installation purposes. Every care has been taken in the preparation of this document but no liability can be accepted for the use of the information therein. Design features may be changed or amended without prior notice.
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ISO9001
Design, Manufacture and Supply to Quality Management Systems Certified to ISO9001:1994

Quality Systems Certificate No. 154
Assessed to ISO9001

HI-SPEC1 ASD & HI-SPEC2 ASD

HI-SPEC ASD was developed to serve a wide range of applications with the highest specifications. The system has a 3-stage alarm system and a smoke level display in bar graph form.

The HI-SPEC2 ASD enables the use of a second detector module. This means that one air sampling device can monitor two separate monitored areas. Alternatively, double-knock detection can be set up for both room and equipment monitoring purposes. The DIAG3 diagnostics tool enables quick and easy configuration and download of event log.

The coverage of the detector is in accordance with EN 54-20: a single HI-SPEC2 ASD system can replace up to 64 point-type smoke detectors. Thanks to a powerful fan operating, a pipe length of up to 560 m can be achieved fulfilling EN 54-20 Class A to C requirement.



Specifications

HI-SPEC1 ASD & HI-SPEC2 ASD

Mechanical specification

	HI-SPEC1 ASD	HI-SPEC2 ASD
• Dimensions		
Width:	200 mm	200mm
Height:	292 mm	292mm
Depth:	113 mm	113mm
• Weight:	1460g	1560g
• Max. number of sampling holes	32	64
• Max. pipe length (with max. number of sampling holes)	300 m	560 m
• Number of detector modules	1	2
• Max Wire Gauge for Terminals:	1.5mm^2	1.5mm^2

Electrical specification

• Operating voltage:	24 V DC (14 - 30 V DC)	
• Alarm and fault relay power rating	1 A, 30 V dc, max. 24 W	
• Max. quiescent current (at 24 V DC)**	200 mA	230 mA
• Max. alarm current (at 24 V DC)**	230 mA	290 mA
• Starting current limited to	300 mA	330mA

General information

- Monitoring of pipe systems for breakage and obstruction.
- Optional adjustment for individual hole monitoring*
- Double-knock detection option
- Built-in event log, with additional external datastorge option using the DIAG3 diagnostics software
- Approved in accordance with EN 54-20, Classes A, B, C (manufacturer's certificate):
  - VdS-No. G 206004
  - BPRI-No. 0786-CPD-20685
- Monitored area per sampling hole corresponds to one point-type smoke detector in accordance with BS5839 & BS6266.

Displays on device

• Pre-alarm	1 red alarm display per detector
• Main alarm	1 red alarm display per detector
• Info alarm	1 red alarm display per detector
• Smoke level	10 step bar graph display per detector
• Fault signal	Yellow collective fault
• Operation	Green operation display

Detector sensitivity

	info alarm	pre alarm	main alarm
ASD-TT-05[1]	0.17	0.3	0.5
ASD-TT-01[2]	0.03	0.07	0.1
ASD-TT-001[3]	0.005	0.010	0.015

Sensitivity measured as % LT/m (light obscuration per metre)

Sampling holes in accordance with EN 54-20 Classes:
[1]A max. 2x3, B max. 2x7 and C max. 2x15
[2]A max. 2x9, B max. 2x32 and C max. 2x32
[3]A max. 2x32, B max. 2x32 and C max. 2x32

Environmental specifications

• Temperature Range:	-20°C to +60°C
• Humidity:	10 to 95% relative humidity (non-condensing)
• Ingress Protection	IP20

Other products in the range

HI-SPEC1 ASD & HI-SPEC2 ASD are also available in cold storage versions capable of operating in temperatures as low as -40°C or silent versions, which operates at noise levels as low as 23 dB (A). Please contact us for full details.

A comprehensive range of pipework system parts and accessories, along with PipeXpress project planning software, are also available from Notifier by Honeywell.

* Depending on project design
**at standard 6.9V fan voltage

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ALL-SPEC1 ASD & ALL-SPEC2 ASD



ALL-SPEC ASD is a universal air sampling device for a broad range of applications. The high degree of modularity of the device makes it possible to achieve a highly adaptable, cost-effective solution.

An additional price advantage comes with the optional equipping of the device with a second detector module. This means that one air sampling device can monitor two separate monitored areas. Alternatively, double-knock detection can be set up for both room and equipment monitoring purposes. The DIAG3 diagnostics tool enables quick and easy configuration and download of event log.

The coverage of the detector is in accordance with EN 54-20: a single ALL-SPEC2 system can replace up to 64 point-type smoke detectors. Thanks to a powerful fan, a pipe length of up to 560m can be achieved fulfilling EN 54-20 Class A to C requirement.

Specifications

ALL-SPEC1 ASD & ALL-SPEC2 ASD

Mechanical specification

	ALL-SPEC1 ASD	ALL-SPEC2 ASD
• Dimensions		
Width:	200 mm	200mm
Height:	292 mm	292mm
Depth:	113 mm	113mm
• Weight:	1460g	1560g
• Max. number of sampling holes	32	64
• Max. pipe length (with max. number of sampling holes)	300 m	560 m
• Number of detector modules	1	2
• Max Wire Gauge for Terminals:	1.5mm^2	1.5mm^2

Electrical specification

• Operating voltage:	24 V DC (14 - 30 V DC)	
• Alarm and fault relay power rating	1 A, 30 V DC, max. 24 W	
• Max. quiescent current (at 24 V DC)**	200 mA	220 mA
• Max. alarm current (at 24 V DC)**	210 mA	240 mA
• Starting current	300 mA	320mA

General information

- Monitoring of pipe systems for breakage and obstruction.
- Optional adjustment for individual hole monitoring*
- Double-knock detection option
- Built-in event log, with additional external data storage option using the DIAG3 diagnostics software
- Approved in accordance with EN 54-20, Classes A, B, C (manufacturer's certificate):
  - VdS-No. G 202064
  - BPRI-No. 0786-CPD-20685
- Monitored area per sampling hole corresponds to one point-type smoke detector in accordance with BS5839 & BS6266.

Displays on device

- Alarm 1 red alarm display per detector module
- Fault Yellow collective fault
- Operation Green operation display

Detector sensitivity

	alarm
ASD-TP-05[1]	0.5
ASD-TP-01[2]	0.1
ASD-TP-001[3]	0.015

Sensitivity measured as % LT/m (light obscuration per metre)

Sampling holes in accordance with EN 54-20 Classes:
[1]A max. 2x3, B max. 2x7 and C max. 2x15
[2]A max. 2x9, B max. 2x32 and C max. 2x32
[3]A max. 2x32, B max. 2x32 and C max. 2x32

Environmental specifications

- Temperature Range: -20°C to +60°C
- Humidity: 10 to 95% relative humidity (non-condensing)
- Ingress Protection IP20

Other products in the range

ALL-SPEC1 ASD & ALL-SPEC2 ASD are also available in cold storage versions capable of operating in temperatures as low as -40°C or silent versions, which operates at noise levels as low as 23 dB (A). Please contact us for full details.

A comprehensive range of pipework system parts and accessories, along with PipeXpress project planning software, are also available from Notifier by Honeywell.

* Depending on project design
** at standard 6.9V fan voltage

COMPACT ASD & COMPACT2 ASD

The COMPACT ASD air sampling smoke detection system is a cost-effective solution for monitoring small to medium-sized spaces and equipment. The COMPACT2 ASD incorporates a room identification (ROOM·IDENT) function enabling it to monitor up to 5 rooms or facilities and to identify the source of the potential fire.

A COMPACT ASD system can be used to replace up to 8 point type smoke detectors. This requires up to 50 m of pipe length, regardless of whether Class A, B or C is required in accordance with EN 54-20.

The COMPACT ASD is ideal for applications where larger air sampling smoke detection systems would not be cost-effective or in situations that require individual room identification. The DIAG3 diagnostics tool enables quick and easy configuration and download of event log.



Specifications

COMPACT ASD & COMPACT2 ASD

Mechanical specification

- Dimensions
  - Width: 140 mm
  - Height: 222 mm
  - Depth: 70 mm
- Weight: 850 - 895g*
- Max. number of sampling holes 8
- Max. pipe length (with max. number of sampling holes) 50 m
- Max Wire Gauge for Terminals: 2.5mm²

General information

- Monitoring of pipe systems for breakage and obstruction.
- Optional adjustment for individual hole monitoring**
- Built-in event log, with additional external data storage option using the DIAG3 diagnostics software
- Detection Sensitivity
  - Pre-alarm: 0.25 % LT/m
  - Main alarm: 0.50 % LT/m

  Sensitivity measured as % LT/m (light obscuration per metre)

  Sampling holes in accordance with EN 54-20 Classes:
  A max. 2, B max. 6 and C max. 8
- Approved in accordance with EN 54-20, Classes A, B, C (manufacturer's certificate):
  - VdS-No. G 202064
  - BPRI-No. 0786-CPD-20322
- Monitored area per sampling hole corresponds to one point-type smoke detector in accordance with BS5839 & BS6266.

Electrical specification

- Operating voltage: 24 V DC (16 - 30 V DC)
- Alarm and fault relay power rating 1 A, 30 V DC, max. 24 W
- Max. quiescent current (at 24 V DC) 105 mA (at 9V standard fan voltage)
- Max. alarm current (at 24 V DC) 110-140 mA (at 9V standard fan voltage)
- Starting current 150 mA

Displays on device

COMPACT ASD

- Pre-alarm and main alarm 1 red alarm display for each stage
- Fault signal Yellow common fault
- Operation Green operation display

COMPACT2 ASD

- Pre-alarm and main alarm 1 red alarm display for each stage
- Fault Yellow common fault
- Operation Green operation display
- ROOM·IDENT indicators 5 red alarm displays

Environmental specifications

- Temperature Range: -20°C to +60°C
- Humidity: 10 to 95% relative humidity (non-condensing)
- Ingress Protection IP54

* Depending on device configuration
** Depending on system design

Product Range at a Glance

		Sensitivity	Part Number
	COMPACT ASD (including detector)	0.5% obscuration/m	ASD-CM
	COMPACT2 ASD (including ROOM-IDENT functionality)	0.5% obscuration/m	ASD-CM2
	ALL-SPEC1 ASD		ALL-SPEC1
	ALL-SPEC2 ASD		ALL-SPEC2
	Smoke detectors for ALL-SPEC ASD	0.5% obscuration/m	ASD-TP-05
		0.1% obscuration/m	ASD-TP-01
		0.015% obscuration/m	ASD-TP-001
	HI-SPEC1 ASD		HI-SPEC1
	HI-SPEC2 ASD		HI-SPEC2
	Smoke detectors for HI-SPEC ASD	0.5% obscuration/m	ASD-TT-05
		0.1% obscuration/m	ASD-TT-01
		0.015% obscuration/m	ASD-TT-001

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