

### Smoke/heat detector for 2-wire and 4-wire system applications

### Description

SNC-300 non-addressable photoelectric smoke/heat detectors are state-of-the-art detectors suitable for connection to 2-wire or 4-wire non-addressable fire detection control and indicating equipment, or to addressable fire detection control and indicating equipment that can accept non-addressable type detectors<sup>1</sup>.

Advanced electronics in conjunction with a photoelectric smoke sensing chamber and an electronic thermistor provide early detection of fire and high immunity against unwanted alarms. The heat sensor provides sensitive rate-of-rise operation or fixedtemperature operation when the response threshold value is exceeded.

The SNC-300 non-addressable detector range provides fire detection and alarm system designers with a Standardscompliant economical smoke/heat detector for life safety and property protection applications.

#### Features

- Dual photoelectric smoke and heat sensors to detect either smoke, heat or a combination of the phenomena
- Advanced algorithms provide analogue detection discrimination
- Ideal for both fast-flaming and slow smouldering fires
- Surface-mount device (SMD) circuit board design
- High immunity against unwanted alarms
- Stable smoke sensing chamber. No adjustment or replacement required
- Durable heat sensor. No adjustment or replacement required
- 2-wire and 4-wire models for DC 12 V and DC 24 V operation
- 4-wire model for DC 48 V operation
- 4-wire models available with a N/O alarm relay output
- 4-wire models available with auto-reset function
- 2-wire models available with remote LED output
- Connects to zone monitor for use with addressable control and indicating equipment
- Sleek low-profile housing design
- Dual LEDs for 360° visibility
- Low maintenance

#### Compliance

SNC-300 smoke/heat detectors have the following compliance.

	EN 54-5 ª UL 521 <sup>b</sup>	EN 54-7 ° UL 268 <sup>d</sup>	CE
SNC-300-C2	1	1	✓
SNC-300-CL	1	1	✓
SNC-300-CR	1	1	✓
SNC-300-CR4	—	—	✓
SNC-300-CA	—	—	1

<sup>a</sup> EN 54-5 Fire detection and fire alarm systems. Heat detectors. Point detectors

<sup>b</sup> UL 521 Heat detectors for fire protective signaling systems

<sup>c</sup> EN 54-7 Fire detection and fire alarm systems. Smoke detectors. Point detectors

using scattered light, transmitted light or ionization

 $^{\rm d}$  UL 268 Smoke detectors for fire alarm signaling systems



SNC-300 non-addressable smoke/heat detector

#### Accessories

The following accessories are compatible with SNC-300 smoke/heat detectors.

Description	Part number	Datasheet
5-terminal 102 mm low profile base	CN3023	31-0035
5-terminal 102 mm low profile base <sup>a</sup>	CN3021	31-0035
9-terminal 102 mm low profile base	CN3043	31-0037
9-terminal 102 mm low profile base <sup>a</sup>	CN3041	31-0037
Detector monitor module	620-001	31-0027
Remote indicator <sup>b</sup>	681-001	31-0034
<sup>a</sup> UL-approved. <sup>b</sup> Requires 9-terminal base.		

<sup>1</sup> May be used with the 620-001 detector monitor module.

## Specifications

-	SNC-300-C2 SNC-300-C2-U	SNC-300-CL SNC-300-CL-U	SNC-300-CR	SNC-300-CA	SNC-300-CR4	
Operating voltage	DC (10.8 ~ 33) V		DC (10.8 ~	DC (10.8 ~ 26.4) V		
Start-up current	≤ 1	Αμ 00	≤ 135 µA			
Start-up time			≤ 30 s			
Quiescent current	≤ 75 µA					
Alarm current (max)	50 mA			35 mA		
Sampling time	(3 ~ 5) s					
Alarm response threshold (smoke)	(0.08 ~ 0.15) dB/m					
Alarm response threshold (heat)	59 °C static, and rate-of-rise °					
Alarm indicator	Dual red LEDs					
Remote LED output current (max)	— 15 mA —					
Reset voltage	≤1V					
Reset time	≤5s					
Auto-reset time	_			(4 ~ 6) s	—	
Alarm output relay	_		SPST. N/O. 1.0 A @ DC 30 V / 0.5 A @ AC 125 V	Ι	SPST. N/O. 1.0 A @ DC 30 V / 0.5 A @ AC 125 V	
Operating temperature	(-10 ~ +55) °C					
Operating humidity	(0 ~ 95) % RH, non-condensing					
Storage temperature	(-25 ~ +80) °C					
Storage humidity	(0 ~ 98) % RH, non-condensing					
Dimensions (excluding contacts)	Φ 102 mm × 45 mm					
Ingress protection rating	IP-42					
<sup>a</sup> Detectors are factory-configured for 30 k	/min and comply with E	N 54-5 class A1 and cl	ass A2.			

# **Ordering Information**

	2-Wire	4-Wire	Remote Indicator <sup>a</sup>	Relay Output	Auto Reset
SNC-300-C2 <sup>b</sup>	1	_	_	_	_
SNC-300-CL b	1	_	1	_	_
SNC-300-CR b	_	✓	_	✓	—
SNC-300-CR4	_	1	_	✓	_
SNC-300-C2-U °	1	—	_	—	—
SNC-300-CL-U °	1	_	✓	_	_
SNC-300-CR-U °	_	1	_	✓	_
SNC-300-CA	_	✓	_	_	✓

<sup>a</sup> Requires 9-terminal base if remote indicator is installed.

<sup>b</sup> EN type. ° UL type.

View the complete range of products at <u>www.numens.net</u>





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