



OP320A

Synova™

## Optical smoke detector



For the auto-addressable detector bus SynoLOOP

- 
- **Patented technology: 10x more resistant to dust and dirt than average**
  - **For special need: The detector sensitivity can be easily increased with the SW-tool or control panel.**
  - **Immune to electromagnetic interference from mobile telephones, fluorescent lights and most other sources**
  - **Auto-addressing eliminates the setting of dip switches, punch cards, etc. For a safe and easy start up**
  - **Built-in isolator: in each SynoLOOP auto-addressable element**
  - **Click concept: Plug-in connections for detector installation and line connection**
  - **Siemens special: Each detector housing can be colored**
  - **Automatic localization of interruptions and short circuits**

## Features

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The optical smoke detector OP320A has an excellent all-round performance. It has a completely new and patented optical chamber with the latest electronics which opens up new dimensions in safety and functionality.

### ● Product features

The OP320A has a completely new and patented optical system:

- An excellent signal / noise ratio is achieved by precise beam guidance.
- The asymmetrical, highly polished labyrinth enables a level of light absorption greater than ever before.
- Due to the design of the futuristic looking grid, the optical chamber has a very good resistance against both dirt and dust build-up, ensuring the receiver is not affected by those areas.
  
- The immunity against electromagnetic interference is at least five times better than the present standards.
  
- The OP320A detector is auto-addressed the first time the control panel is switched on. It allows individual identification in case of alarm.
  
- A loop system ensures optimum security - should a short circuit occur, a built-in isolator localizes the defective part on the detector bus and isolates it between two devices, therefore saving time investigating the entire system.

### ● Application

- The Optical detector OP320A is an excellent all-round detector. It is particularly suitable where there are normal environmental conditions.

## Design

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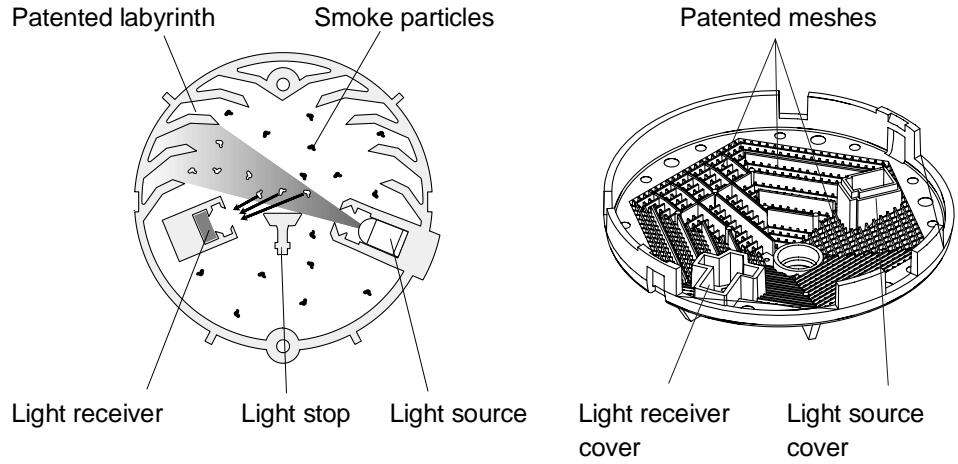
- SO320 detector base – mounted whilst running cables – contains only the screw less click-in connector
- Click concept:
  - Plug-in connector for wiring (line connection)
  - Plug-in mounting for detector
- Up to two external alarm indicators type AI300/AI340 can be connected to each detector

## Options

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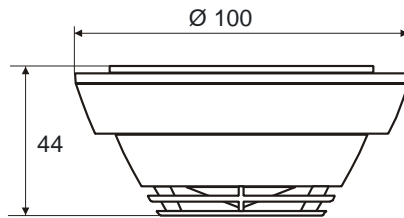
- CDM320 commissioning module: plug-in to check the pre-wired detector lines and base
- SOA322 base attachment for surface mounting
- Anti-theft device: TP320 detector cover locking device

## Functional features of patented optical chamber

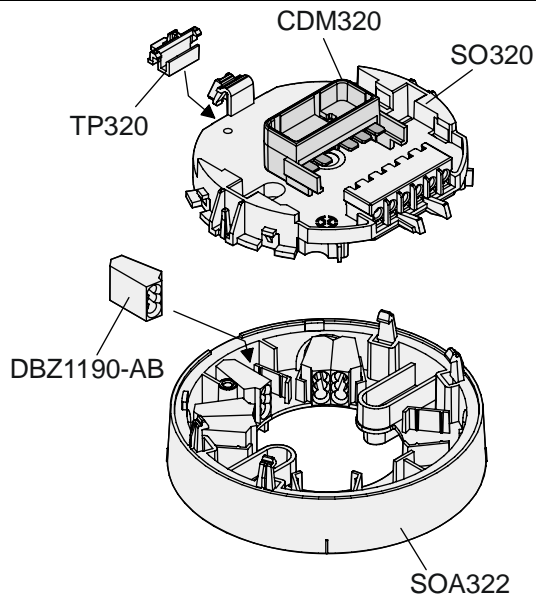


## Dimensions

OP320A with SO320




## Accessories



## Technical data

Operating voltage	DC 16... 28 V
Operating current (quiescent)	max. 200 µA
Response sensitivity	~2.5 %/m (high sensitivity ~1.8 %/m)
Operating temperature	-10... +55 °C
Storage temperature	-20... +65 °C
Humidity (no condensation)	≤95 % rel.
Protection category	IP44
Color	white, ~RAL 9010
Standards	EN 54-7, EN 54-17
Approvals	
– VdS	G298004
– LPCB	531e/03
System compatibility	Compatible with all SynoLOOP compatible panels. A list of compatible equipment is available from your local sales office.
QS Standard	Industry-specific, certified quality assurance system in accordance with EN ISO 9001:2000.

05  0786	<b>OP320A</b>	Siemens Switzerland Ltd, Gubelstrasse 22 CH-6301 Zug Technical data: see doc. <b>001924</b>
OP320A - Point type smoke detector incl. short circuit-isolator for use in fire detection and fire alarm systems installed in buildings.		
305/2011/EU (CPR): EN 54-7 / EN 54-17 ; 2014/30/EU (EMC): EN 50130-4 / EN 61000-6-3		
The declared performance and conformity can be seen in the Declaration of Performance (DoP) and the EU Declaration of Conformity (DoC), which is obtainable via the Customer Support center: Tel. +49 89 9221-8000 or <a href="http://siemens.com/bt/download">http://siemens.com/bt/download</a>		
DoP No.: 0786-CPR-20164; DoC No.: CED-OP320A		

## Details for ordering

	Type	Part no.	Designation	Weight
Detector	OP320A	BPZ:5081620001	Optical smoke detector	0.060 kg
	SO320	BPZ:5085990001	Base for Synova 300 series detectors	0.020 kg
Accessories	SOA322	BPZ:5358340001	Base adapter for surface mounting	0.020 kg
	DBZ1190AB	BPZ:4942340001	Connecting terminal 1... 2.5 mm <sup>2</sup>	0.001 kg
	CDM320	BPZ:5162350001	Commissioning unit	0.010 kg
	TP320	BPZ:5093100001	Detector cover locking device	0.005 kg
	FDAI92	S54370-F3-A1	Alarm indicator for wall mounting	0.050 kg
	FDAI91	S54370-F9-A1	Alarm indicator for door frame	0.020 kg
	AI330	BPZ:3169430001	Additional frame	0.020 kg

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