



OP620A / OH620A / HI620A / HI622A

Synova™

## Automatic fire detectors



For auto-addressable detector bus SynoLOOP

- 
- **High degree of reliability and stability**
  - **Individual identification of detectors**
  - **High degree of operational reliability through signal processing in the detector and in the control unit**
  - **Built-in line disconnection function**
  - **High resistance to**
    - electromagnetic interference
    - humidity and corrosion
  - **Modern design**
  - **Blend well with every room decor**
  - **Environmentally safe material**
    - halogen-free plastic material identifiable through embossed code
    - easy to uninstall and disassemble
  - **Comprehensive final examination and quality control**

## Smoke detector OP620A, analogue/addressable wide spectrum

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- Uniform response behavior for different types of fire
- New, high performance optoelectronic sensor system
- High resistance to soiling

- **Function**

- The detector transmits the danger signal '**standard**' and '**high sensitivity**' to the control unit. The control unit evaluates as a default the danger signal 'standard'. Due to corresponding programming the danger signal 'high sensitivity' can be evaluated.
- The detector has traced a fault and continued operation is no longer assured. The control unit verifies the signal and indicates 'fault' if received repeatedly.
- Address allocation in installation sequence
- A built-in line disconnection switch isolates the defective part if the detection line suffers short circuit.
- Built-in alarm indicator provides on-site signaling of alarm.
- Deviation from the quiescent value caused e.g. by soiling is transmitted by the detector to the control unit.

- **Application**

- For the early warning of smoke-forming flaming fires and smoldering fires.

## Heat detectors HI620A / HI622A

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- Maximum temperature alarm activation with quality thermo sensor
- HI620A: Reliable heat detector for demanding requirements
  - heat detector with wide application range (up to +50 °C)
  - response behavior immune to deceptive phenomena with rapid and slow increases in temperature
  - intelligently designed differential characteristics
- HI622A: Reliable heat detector with maximum temperature activation (activating temperature + 80 °C) for special applications.

- **Function**

- The detector has traced a fault and continued operation is no longer assured. The control unit verifies the signal and indicates 'fault' if received repeatedly.
- Address allocation in installation sequence
- A built-in line disconnection switch isolates the defective part if the detection line suffers short circuit.
- Built-in alarm indicator provides on-site signaling of alarm.

- **Application**

- **HI620A:** For the monitoring of rooms and installations where in the event of fire, a rapid increase in temperature can be expected, or other types of detector cannot be used due to operational reasons.
- **HI622A:** For the monitoring of rooms and installations in which rate-of-rise heat detectors are unsuitable, e.g. with transient vapor or heat development.

## Smoke detector OH620A, analogue/addressable multi-sensor

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- Total response to all types of fire thanks to multi-criteria sensors
  - Combined evaluation of temperature and signals generated by smoke
  - Permanently programmed detection algorithms
  - High resistance to soiling and temperature fluctuation
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- **Function**
    - The detector transmits the danger signal '**standard**' and '**high sensitivity**' to the control unit. The control unit evaluates as a default the danger signal 'standard'. Due to corresponding programming the danger signal 'high sensitivity' can be evaluated.
    - The detector has traced a fault and continued operation is no longer assured. The control unit verifies the signal and indicates 'fault' if received repeatedly.
    - Deviation from the quiescent value caused e.g. by soiling is transmitted by the detector to the control unit.
    - Address allocation in installation sequence
    - A built-in line disconnection switch isolates the defective part if the detection line suffers short circuit.
    - Built-in alarm indicator provides on-site signaling of alarm.
  - **Application**
    - For the early warning of flaming fires involving solid and liquid combustibles as well as smoldering fires.

### Design

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- Mounting with detector base SO620A
- Range of base accessories for installation even in critical locations
- Connection to the control unit via a two-wire line
- Vibration-proof mounting of detector in the base
- Anti-theft device can be built in if required
- Two external alarm indicators can be connected

### Maintenance

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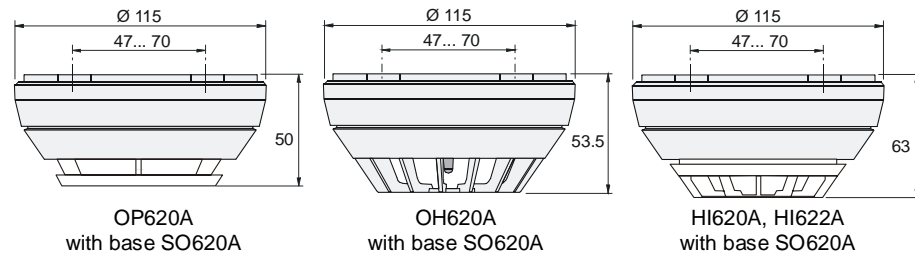
#### **OP620A / OH620A / HI620A / HI622A**

- Detectors can be inserted and removed from their bases with a detector exchanger up to a height of 7m.

#### **OP620A / OH620A**


- By means of a periodic factory overhaul (cleaning and re-calibration), smoke detectors are given a new lease of life.


## Dimensions




## Technical data

|                               | OP620A  | OH620A           | HI620A               | HI622A           |
|-------------------------------|---|------------------|----------------------|------------------|
| Operating voltage (modulated) | 16... 28 VDC  | 16... 28 VDC     | 16... 28 VDC         | 16... 28 VDC     |
| Operating current (quiescent) | max. 200 $\mu$ A  | max. 200 $\mu$ A | max. 200 $\mu$ A     | max. 200 $\mu$ A |
| Operating temperature         | -25... +60 °C   | -25... +60 °C    | -25... +50 °C        | -25... +70 °C    |
| Humidity                      | $\leq$ 95 % rel.  | $\leq$ 95 % rel. | $\leq$ 95 % rel.     | $\leq$ 95 % rel. |
| Protection category IEC60529  | IP44  | IP44             | IP44                 | IP44             |
| Color                         | white, ~RAL 9010  | white, ~RAL 9010 | white, ~RAL 9010     | white, ~RAL 9010 |
| Standards                     | EN54-7, EN54-17   | EN54-7, EN54-17  | EN54-17, EN54-5: A1R | EN54-8: range 1  |
| Approvals – VdS               | G297014   | G297015          | G297066              | G297073          |
| Compatibility                 | Compatible with all fire detection panels, which support the SynoLOOP specifications, e.g. FC330A |                  |                      |                  |
| QS standards                  | Fire protection industry certified quality assurance system according to EN ISO 9001:2000         |                  |                      |                  |

|   |               |   |
|---|---------------|---|
| 05  0786   | <b>OH620A</b> | Siemens Switzerland Ltd, Gubelstrasse 22<br>CH-6301 Zug<br>Technical data: see doc. <b>001695</b> |
| OH620A - Point type smoke detector 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-20152; DoC No.: CED-OH620A  |               |   |

|   |               |   |
|---|---------------|---|
| 05  0786   | <b>OP620A</b> | Siemens Switzerland Ltd, Gubelstrasse 22<br>CH-6301 Zug<br>Technical data: see doc. <b>001695</b> |
| OP620A - Point type smoke detector 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-20149; DoC No.: CED-OP620A  |               |   |

|   |               |   |
|---|---------------|---|
| 05  0786   | <b>HI620A</b> | Siemens Switzerland Ltd, Gubelstrasse 22<br>CH-6301 Zug<br>Technical data: see doc. <b>001695</b> |
| HI620A - Point type heat detector incl. short-circuit isolator for use in fire detection and fire alarm systems installed in buildings.   |               |   |
| 305/2011/EU (CPR): EN 54-5 / EN 54-17 ; 2004/108/EC (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-20156; DoC No.: CED-HI620A  |               |   |

## Details for ordering

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| Type   | Part no        | Designation    | Weight   |
|--------|----------------|----------------|----------|
| OP620A | BPZ:4790000001 | Smoke detector | 0.160 kg |
| OH620A | BPZ:4790130001 | Smoke detector | 0.150 kg |
| HI620A | BPZ:4860640001 | Heat detector  | 0.140 kg |
| HI622A | BPZ:5007750001 | Heat detector  | 0.140 kg |

Base and base accessories see document 001035

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