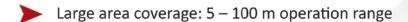


# BEAM SMOKE DETECTOR DOP-6001R



POLON-AL

- Uniquely suitable for smoke detecting
- Adjustable sensitivity threshold levels
- Transmitter and receiver mounted in one housing – significant economy in wiring
- Easy optical path aligning with laser pointer



EN 54-12:2002 Cert/LPCB ref, 1283a



## BEAM SMOKE DETECTOR DOP-6001R

The beam smoke detector **DOP-6001R** is designed for detection of smoke, originating in early stage of fire growth. It is especially suitable for protection of rooms, where in the first phase of fire appearing of smoke is expected and in such places, where due to large area large number of point smoke detectors would need to be use.

The detector analyses value of smoke density along the optical beam, and therefore is especially useful for application under high ceilings or in such places, where smoke can be scattered in large area before detection. Beam detectors are especially recommended for application in such buildings like churches, cathedrals, historical buildings with very valuable ceilings, theatres, opera-houses, sporting halls, manufacturing halls, very high rooms, in which point detectors would be ineffective, rooms with differentiated ceilings, corridors, cable ducts, area over false ceilings etc.

**DOP-6001R** is equipped with both fire and fault relays for operation with any fire detection and alarm systems. The detector requires external power supply.

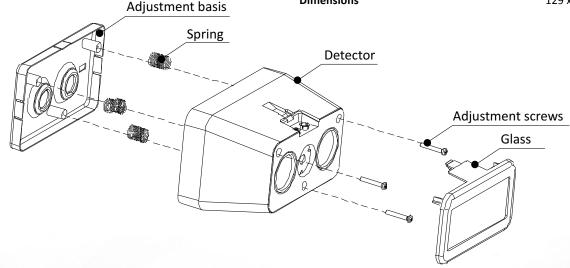
### **Specific features**

- Transmitter and receiver are placed in one cabinet and infrared radiation beam reflects from a special prismatic reflector, therefore there is no need to connect the transmitter and the receiver with cable, as in case of most similar detectors available on the market, which have transmitter and receiver in independent casings installation cost is decreased.
- Built-in a laser pointer enables easy and accurate adjustment of optical path of the detector, what is the most labour-consuming process, especially at considerable distances.
- The special prismatic reflector has additional feature of infrared beam concentration, directing it to the receiver. This allows for installation of reflectors on walls and structures subjected to small vibrations, due to presence of heavy machines, as well as deformations as result of big temperature changes (e.g. between day and night).

- Processor-based detector with self-adjusting function, which analyses protected area; decision concerning fire alarm condition is undertaken after several verifications of measured value and comparison with different models of fire growth.
- Early information for the service staff, that the optical elements are soiled (e.g. due to dust deposition) and auto compensation function for maintaining of ability to detect fire threat.
- Flat sensitivity characteristic, independent from dimensions of smoke particles, what gives the possibility of detector's versatile application. Protection of large area with one beam detector eliminates the need to use dozen or so point detectors.
- There is possibility to set sensitivity thresholds depending on distance between detector and reflector, and depending on environmental conditions.

### **Technical data**

Operating voltage	from 9.5 to 28 V
Operating current	
(depending on control panel)	from 8 to 30 mA
Alarm current	from 20 to 100 mA
Current at break of light beam	< 0.3 mA
Service signal current	< 0.3 mA
Operation distance	
with E39-R8 reflector	from 5 to 50 m
Operation dist. with set	
of reflectors 4 x E39-R8	from 50 to 100 m
Sensitivity thresholds (at choice)	18%, 30%
Number of detectors	
in one conventional line	acc. to project
Load of fire and fault	
alarms relays contacts	1 A/30 V
Power supply of laser	
pointer (only during adjustment)	9 V 6F22 battery
Operating temperature range	from -15°C to +55°C
Dimensions	129 x 80 x 84 mm



#### POLON-ALFA S.A.