



## **Time in the Hotspot**

**Smoke from a fire leaves only a few minutes  
between life and death**

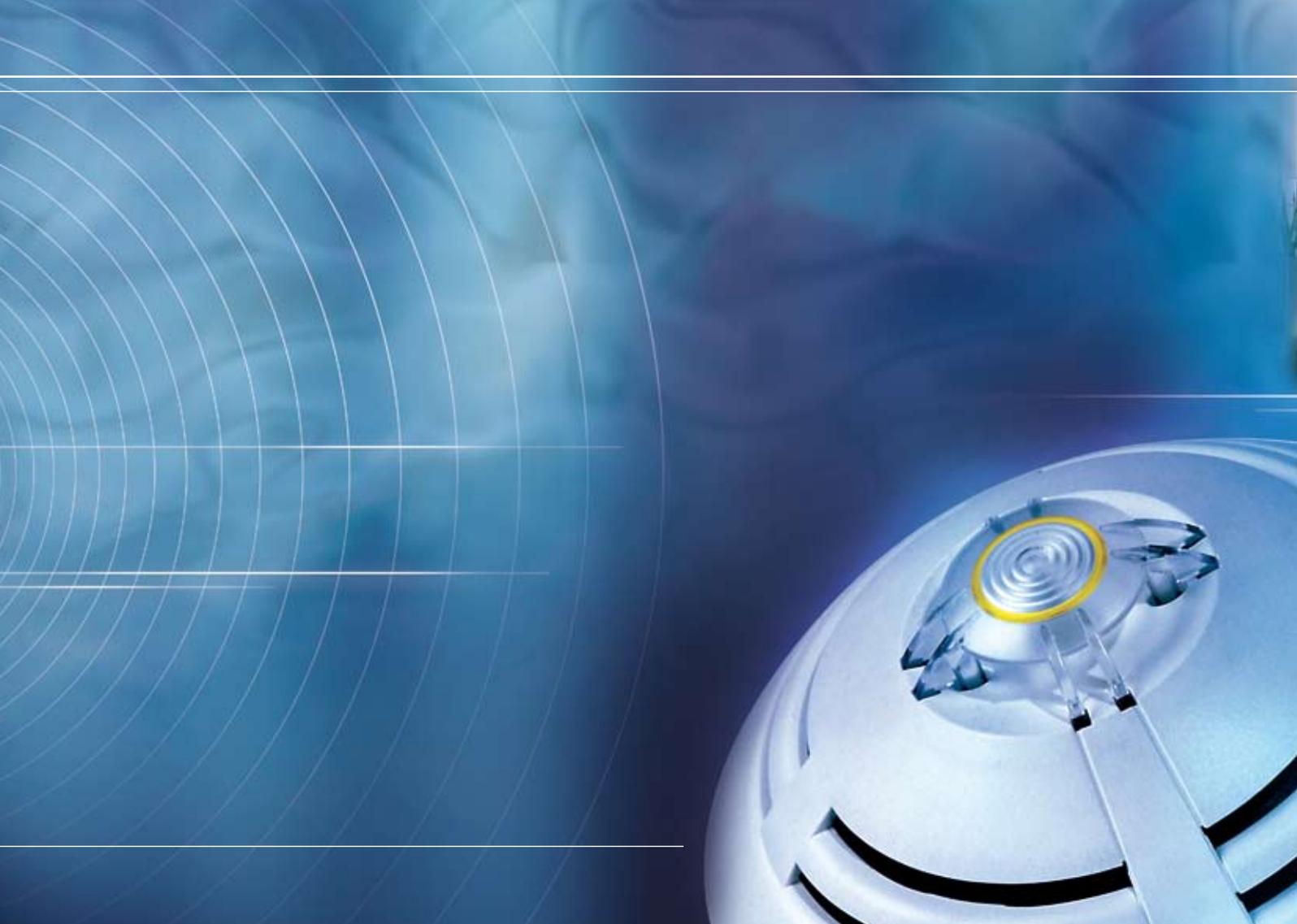


An experiment with candles has shown that the human being will lose consciousness and die just as fast as the flames go out in the smoke – if he does not escape or if he is saved in time. Since the red hemoglobin bonds with carbon monoxide 250 times faster than with oxygen, even a small concentration (0.3 Vol. %) leads to death from suffocation in several minutes.

## Carbon monoxide turns time into a puff of smoke

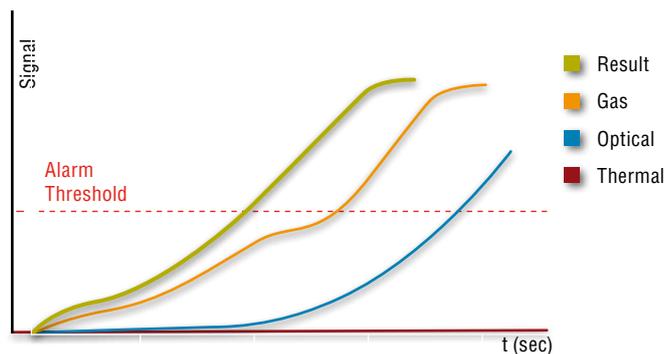
Increased concentrations of carbon monoxide (CO) will extinguish the flame of a candle flame in seconds with. This colorless, tasteless and odorless gas can extinguish a human life just as quickly. In Europe today, four out of five victims of fire actually die of smoke poisoning. Even before the fire and its flames become life-threatening, carbon monoxide is formed in large amounts during the smoldering phase of the fire.

This toxic gas can lead to unconsciousness and breath paralysis within seconds with no prior signs of warning. In such a situation, fast reaction time can save lives. The important question when a fire breaks out: How much time is left?



## IQ8Quad OTG detector: Preventing smoke poisoning

Using intelligent multisensor technology, the IQ8Quad OTG detector can react especially quickly and reliably to the development of smoke from the burning of even the most varied material. The combined evaluation of scattered light, temperature and carbon monoxide concentrations allows the IQ8Quad OTG detector to sound the alarm early enough so that carbon monoxide poisoning can be prevented: Triple protection for that decisive head start.



Example of a fire:  
Cold glowing smoldering  
fire from cotton.

The IQ8Quad OTG  
detector detects with  
three different sensors,  
combines and then evalu-  
ates the results. Thus the  
alarm threshold is achiev-  
ed overall more quickly  
and more reliably.

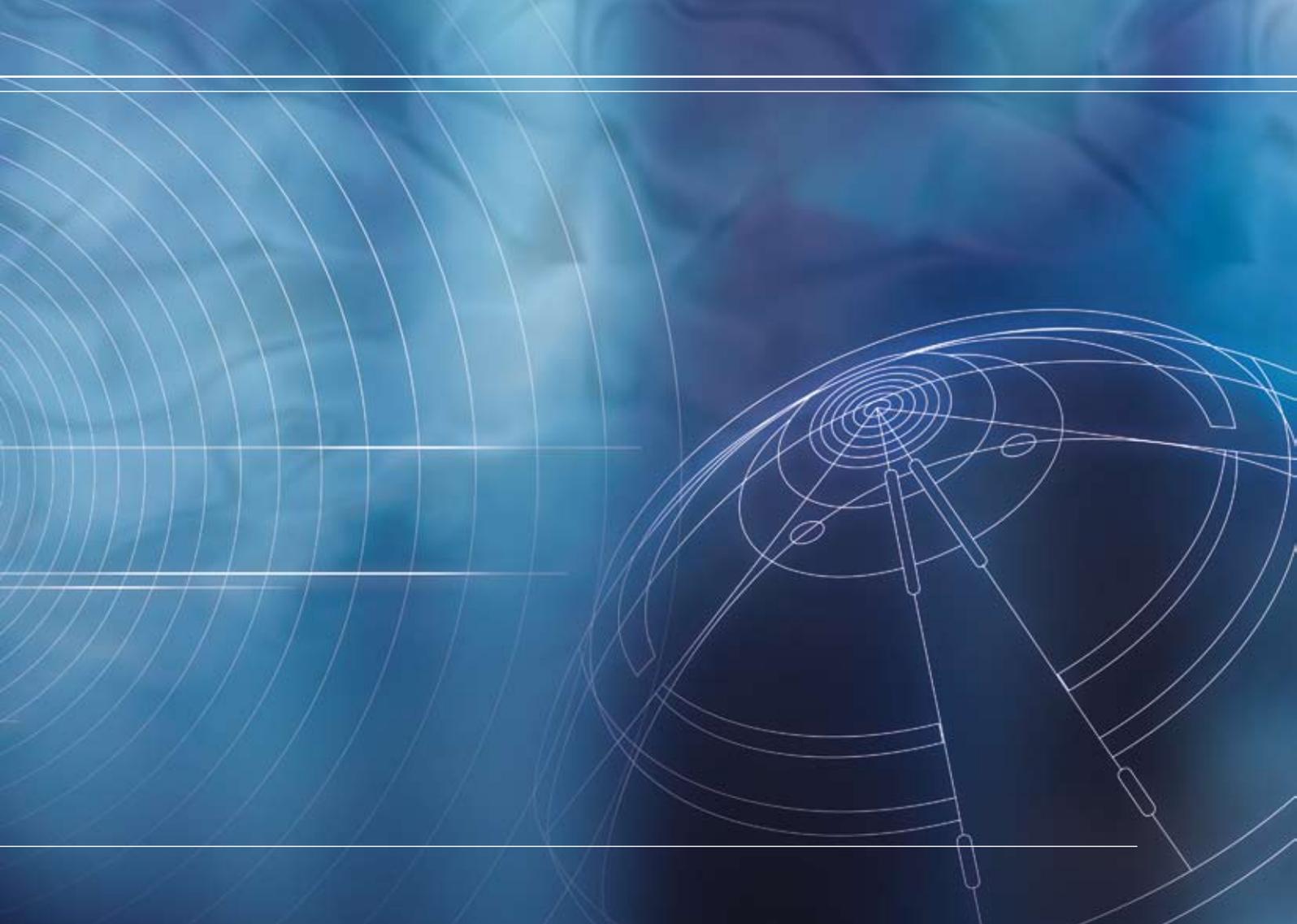


## Protecting human lives

Wherever personal safety is at the forefront, the IQ8Quad OTG multisensor is the first choice: It both detects and alerts in a very early phase.

So buildings can be evacuated more quickly. The IQ8Quad OTG detector is especially effective in protecting areas in

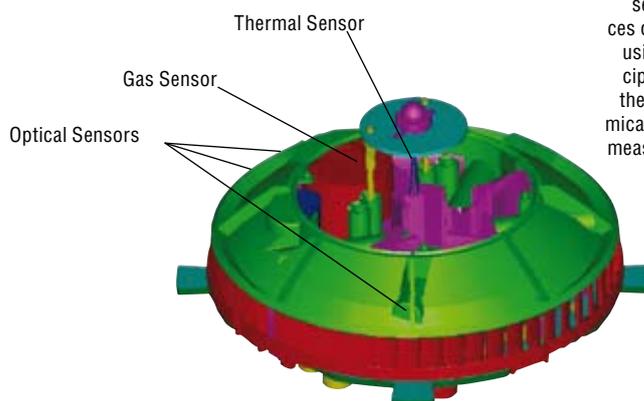
which there are large numbers of people or sleeping people. For example in airports, hospitals, retirement and nursing homes, hotels, youth hostels and public buildings.



## **IQ8Quad OTG detector: A head start with triple protection**

The ESSER IQ8Quad OTG multisensor detects poisonous carbon monoxide using innovative gas sensors in combination with optical and thermal sensors before it becomes harmful to humans. The triple detection principle with optical sensor chamber, heat sensor and electrochemical element covers almost the enti-

re spectrum of all relevant fire scenarios while at the same time protecting against false alarms. In particular, the IQ8Quad OTG can provide valuable time for the saving of lives in such places as hospitals, senior citizen and nursing homes, hotels or public buildings.



The OTG triple principle for the life-saving head start. Three sensors reliably detect sources of danger: optical detection using the scattered light principle; thermal detection using thermometry; and electrochemical detection for the constant measurement of even the slightest CO concentrations.

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