

# High-precision measuring instrument for determining the concentration of SF<sub>6</sub> gas

## Model GA65

WIKA data sheet SP 62.13

### SF<sub>6</sub> Tracer

#### Applications

- Leak test for the final inspection of SF<sub>6</sub> gas-filled equipment
- Monitoring of the concentration of SF<sub>6</sub> gas in the ambient air of enclosed spaces

#### Special features

- High-precision and reproducible measurements in the ppb range
- Fast response time
- Simple operation and long service intervals
- No consumables, e.g. flush gas, are required
- Expendable by multiplexer for up to 24 measuring points



Leak rate measuring instrument for SF<sub>6</sub> gas, model GA65

#### Description

The model GA65 measuring instrument has been specifically designed for measuring small concentrations of SF<sub>6</sub> gas. The quantitative measurement of SF<sub>6</sub> gas in the air is carried out reliably and reproducibly even at the smallest quantities.

The used technology is based on the photo-acoustic infrared spectroscopy. This physical and non-destructive measuring principle achieves a very high accuracy with a detection rate of 6 ppb<sub>v</sub>.

Humidity is compensated and thus does not influence the measuring result.

Cyclic self tests guarantee the reliability and functionality of the instrument. It is recommended to recalibrate the instrument once a year.

The leak rate measuring instrument is easy to use and can be operated via control keys at the front of the housing or via an extensive PC software with a graphic user interface.

Both operating modes allow for the setting of the parameters (e.g. duration of the sampling), the starting of a measurement (manually or automatically), the display of the concentration of SF<sub>6</sub> gas in real time or the sending of the values to the downstream control software.

## Specifications

### Measuring principle

Photo-acoustic infrared spectroscopy

### Detection limit

6 ppb<sub>v</sub> or 6 x 10<sup>-9</sup> ml/s  
(at a flow rate of 60 ml/min)

### Measuring range

6 ... 60,000 ppb<sub>v</sub>

### Resolution

1 ppb<sub>v</sub>

### Sensor characteristics

Temperature and pressure compensated  
Humidity: Cross compensated up to 80 % and 31 °C

### Reproducibility

1 %

### Response time t<sub>90</sub>

approx. 15 seconds

### Permissible temperature ranges

Operation: 5 ... 40 °C  
Storage: -25 ... +55 °C

### Service interval

Once a year

### Warning signals

2 settable alarm values  
Audible and visible

### Electrical output

2 relays (settable alarm values)

### Data storage

Available (internal storage space)  
Software and connection cable included in delivery

## Ordering information

The description of the model is sufficient.

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## Drucksachenänderung/Modification notice

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Folgende Änderungen wurden durchgeführt/Following modifications have been made:

Seite Page	Änderungen (Text, Fotos, Zeichnungen) Modifications (text, photo, drawings)
1-2	Completely reworked

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Sorting information for WIKA Full Catalogue, section

Bitte teilen Sie Ihren Mitarbeitern diese Änderungen mit.  
Please forward these modifications to your colleagues.

Bearbeitet/Modified			Geprüft/Checked			Freigegeben/Approved		
5.4.2013	MS	E. Lungavita	5.4.2013	SF6	O.Rieger	5.4.2013	MS	N. Kroth

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**OBSOLETE**

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