

A rugged, black and grey SF6 leak detector is shown open, revealing its internal components including a pump, a sensor, and a small display screen. The device is positioned in the foreground, with a high-voltage electrical substation in the background. The substation features large metal structures, insulators, and a transformer. The sky is clear and blue.

# SF6 P1:P

## SF6 LEAK DETECTOR

FAST, ACCURATE DETECTION OF LOW  
LEVEL SF6 LEAKS.

[ionscience.com](http://ionscience.com)

Unrivalled Gas Detection<sup>ion</sup>.







# THE SF6 LEAKCHECK P1:P IS AN AWARD WINNING SF6 LEAK DETECTOR ENSURING FAST ACCURATE DETECTION AT ULTRA SENSITIVE LEVELS.

## Best available SF6 leak detection

- Ultra high sensitivity with a  $1 \times 10^{-8}$  ml/sec\*
- Award winning Negative Ion Capture (NIC) technology
- 1 second rise and clear down for rapid leak detection
- Unaffected by large leaks and 100% SF6 meaning no frustrating delays between searches
- Choice of display units cc/sec, gm/yr and ppm for monitoring conformance to leak minimisation targets

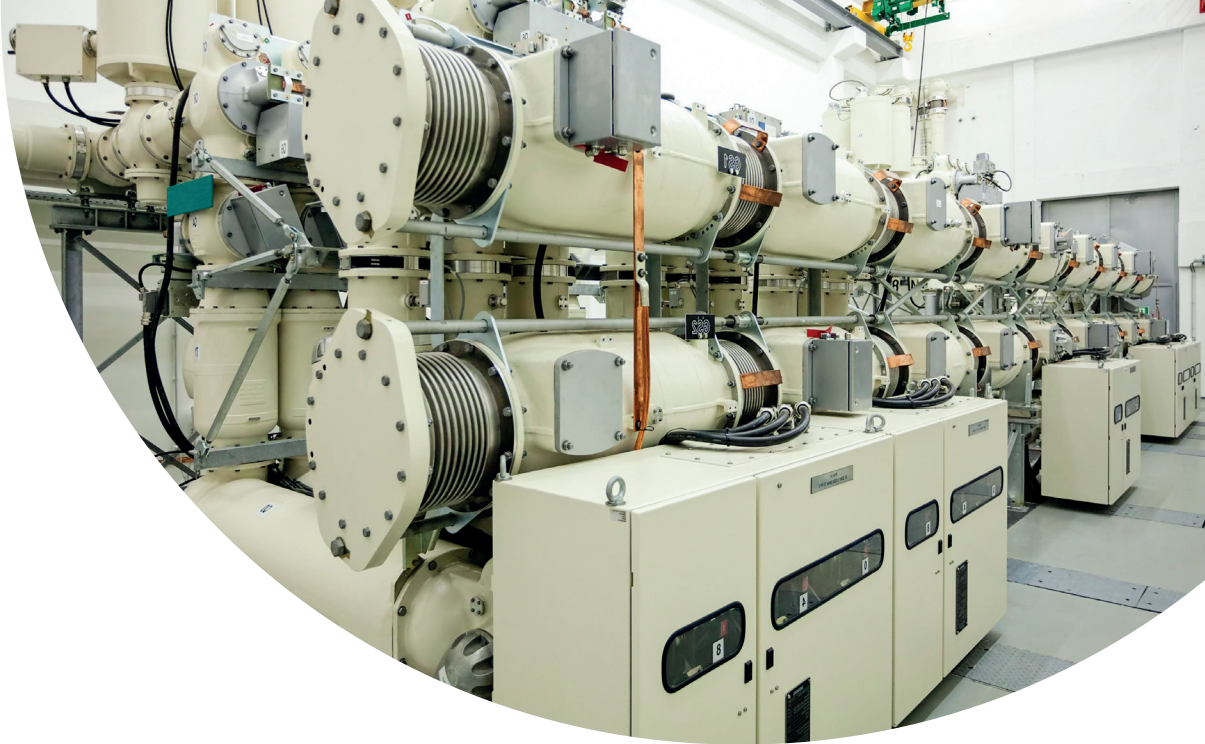
## Ease of use

- Non radioactive source for easy storage and transportation
- No training required - switch on and go
- Lightweight, ergonomically designed handgun
- Touch screen for easy navigation menus
- Simple data storage and printing for analysis

## Low cost

- No argon or other pressurised gases required for reduced cost of ownership
- 2 year warranty when instrument registered online

\*Highsense option



SF6 LeakCheck P1:p is a revolution in SF6 leak detection, ensuring incredibly fast searching at ultra sensitive levels. Even the smallest of leaks can be detected and located swiftly with a minimum detection level of  $1 \times 10^{-7}$  ml/sec or optional  $1 \times 10^{-8}$  ml/sec, equivalent to a grain of rice per year!

Designed for SF6 gas leak testing and measurement in high voltage electrical SF6 switchgear, the instrument also detects other gases with a high affinity for electrons, such as refrigerant R12.

A unique advantage of the instrument is that it is unaffected by exposure to large leaks. Even after saturation or exposure to leaks of 100%, clear down remains rapid (<1s). The SF6 gas leak detector also benefits from having a non-radioactive source, eliminating registration, storage and transportation issues found with traditional radioactive ECD SF6 gas leak detectors.

Additional features of the SF6 gas leak detector include data-logging, alarms; both audio and visual, and a robust portable case. The instrument requires no consumables, such as Argon, reducing the ongoing costs of operation. There are no items requiring maintenance or service in the handgun or console.

The P1:p SF6 gas leak detector meets the demands for quality and traceability to international standards as required by today's industry. It is designed for the location, leak testing and measurement of SF6 leaks in high voltage electrical switchgear.

The instrument's award winning Negative Ion Capture (NIC) technology with non-radioactive source eliminates problems of registration, storage and transportation.

### Extend your instrument warranty

Your SF6 P1:p instrument warranty may be extended by simply registering your product on the Ion Science website within one month of purchase. Visit [www.ionscience.com/instrument-registration](http://www.ionscience.com/instrument-registration) to take advantage of this offer.

### Applications include

- SF6 leak testing and measurement in high voltage switchgear (GIS)
- Breathing apparatus testing
- Medical device testing
- Leak integrity testing on medical, refrigeration and air conditioning equipment containing SF6 and (H)CFCs



## Technical specifications

### MEASUREMENT PRINCIPLE

- Negative Ion Capture (NIC): a non-radioactive, non-restricting carriage and
- no licensing required.

### SENSITIVITY

- Standard SF6 GasCheck P1 and LeakCheck P1:p
- $1 \times 10^{-7}$  ml/sec, 1 ppm, 0.01 gm/yr SF6
- Highsense option
- $1 \times 10^{-8}$  ml/sec, 0.1 ppm, 0.001 gm/yr SF6

### RESPONSE

- T90 = < 1 second rise and clear down

### OPERATION

- Lead acid battery, internal and fully protected
- Recharge between 85-265 AC V, 50/60Hz

### ALARM

- Audio and visual with an optional handset alarm

### MEASUREMENT UNITS

- Measures in ml/sec, gm/yr and ppm
- Range: each unit 1:500
- Accuracy:  $\pm 5\%$  of displayed leak rate or  $\pm 2$  digits
- Repeatability:  $\pm 1$  digit

### CALIBRATION

- Via CalCheck calibration accessory

### DATA LOGGING

- Over 500 data points with date and time stamp
- Download via RS232 to a PC

### TEMPERATURE

- Storage: -10 to 60 °C (14 to 140 °F)
- Operating: 0 to 50 °C (32 to 122 °F)

### DIMENSIONS

- SF6 LeakCheck P1:p
- Consol: 500 x 400 x 190 mm (19.7 x 15.7 x 7.5")
- Shipped: 520 x 430 x 210 mm (20.5 x 16.9 x 8.3")

### WEIGHT

- SF6 LeakCheck P1:p
- Shipped 15 kg (33 lb)

SF6 P1:p V1.6. This publication is not intended to form the basis of a contract and specifications can change without notice.

#### Accessories

Your SF6 P1:p is supplied with an exclusive range of accessories. Visit [www.ionscience.com/sf6](http://www.ionscience.com/sf6) for more info.

### Distributed by:

**ION Science Ltd**  
The Hive, Butts Lane,  
Fowlmere, Cambridgeshire,  
SG8 7SL, UK

**T** +44 (0)1763 208503  
**E** [info@ionscience.com](mailto:info@ionscience.com)