



® Knowledge Beyond Measure.

# Respirator Leak Tester

Model 8119A



## Verify the integrity of respirators with ease

The Respirator Leak Tester 8119A is an accessory for the Automated Filter Tester 8130A that empowers you to perform critical tests whenever doubts arise about mask integrity, e.g. after maintenance. It is the next generation and successor to the original 8119 accessory used with the legendary Automated Filter Testers 8127 and 8130.

The Respirator Leak Tester 8119A is designed with precision and reliability in mind, making it the ideal companion for the Automated Filter Tester 8130A. With this essential add-on, you can perform integrity tests quickly and confidently, ensuring that your respiratory protection equipment meets the highest standards of safety and effectiveness.

The 8119A enables you to verify the integrity of respirators with ease, giving you the confidence that your equipment is up to the task. For example, after maintenance or repairs, you need to be certain that your respirators are still providing the protection they were designed for. The 8119A allows you to conduct crucial tests to verify that your equipment is in top condition, safeguarding occupational health and safety. Don't compromise on safety; make sure your masks are in proper physical condition with our NEW Respirator Leak Tester.

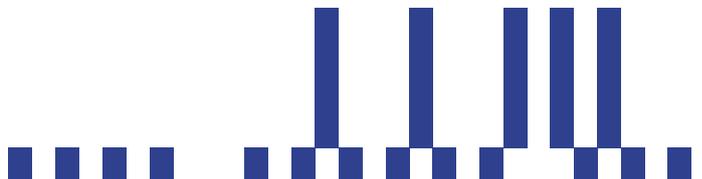
The comprehensive Respirator Leak Tester 8119A comprises a base plate, a flow distribution block, a head form, and software.

## Features and Benefits

- **Compatibility:** Designed specifically for use with the Automated Filter Tester 8130A
- **Installation:** Fast and straightforward, requiring only two screws
- **Highly Sensitive Photometer:** The photometer technology detects even the tiniest increase in aerosol concentration due to damage or leaks
- **No Hardware or Firmware Changes Required:** Seamlessly integrates with your existing 8130A system
- **Faster Testing:** By using the hardware of the standard 8130A with higher flow rate and aerosol concentration, the tests can be performed faster compared to similar alternatives
- **Intuitive Software:** Data logging and charting shows locations of leaks in real time

## Applications

- Eyepiece(s)
- Inhalation valve
- Exhalation valve
- Speaking diaphragm
- Cartridge threads
- Physical damage



## Specifications

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### Challenge Aerosols

Generation Technique (oil)	Using TSI® 1081414R family of oil generators: cold atomization of Emery oil, DOP, DEHS, Paraffin oil with felt conditioner. Oil (but not DOP) is recommended for ease of maintenance
Generation Technique (salt)	Using TSI® 8118A family of salt generators: cold atomization of NaCl with impactor
Specifications	See 8130A or generator manuals for baseline specifications at the plane of the chuck without the 8119A accessory. The size distributions and mass concentration measured at the probe outlet will differ due to losses through the flow block, probe, and choice of dilution flow
Aerosol Delivery	Push-button Probe and selection of five (5) tips

### Challenge Aerosol Detection

Technique	Solid-state, forward light scattering photometer (downstream unit in 8130A)
Dynamic Range	1 µg/m <sup>3</sup> to > 200 mg/m <sup>3</sup>
Aerosol Sampling	TSI-supplied head form to mount masks and respirators; custom user-supplied adapters possible

### Flow Measurement and Control

Technique	Measured using Model 4045 TSI® flow meter, controlled by needle valve, both in 8130A
Range	0-110 L/min (tester maximum); default recommended value is 60 L/min
Accuracy	2% of reading or 0.05 SLPM, whichever is greater (8130A MFM specification)

### Pressure Measurement and Control

Technique	Probe pressure measured by differential pressure (resistance) transducer, controlled by dilution flow rotameter, both in 8130A
Range	0-255 mm H <sub>2</sub> O; 210 mm H <sub>2</sub> O is nominal recommended value
Accuracy	2% of full scale

### Communications

Modbus TCP over ethernet connection with 8130A

### Software

8119A software for control and data acquisition; user must supply their own PC to install software

### Operating Requirements

Compressed Air	Same as 8130A
Power	Same as 8130A
Aerosol Venting	Aerosol probe emits small amount of aerosol into the ambient, so a fume hood or extractor near head form work space is required. Otherwise, same as 8130A
Environmental Conditions	Same as 8130A

### Noise level

Same as 8130A

### Dimensions (L x W x H) (envelope, with head form installed)

19.5 in. x 9 in. x 11.5 in. (49.5 cm x 23 cm x 29 cm)

### Weight

25 lbs. (11.34 kg)

To Order	Description
Specify 8119A	Respirator Leak Tester

Specifications are subject to change without notice.

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