

## Fume Hood Performance Testing Kit

Fume hood performance testing requires a lot of hardware and professional software. The fume hood performance testing kit manufactured by D-Industrial contains everything (hardware and software) required to perform ANSI/ASHRAE 110-2016 (AM, AI and AU).

D-INDUSTRIAL fume hood performance test kit was designed on the basis of nearly 5 years of fume hood testing experience. It has a powerful fume hood test hardware and software configuration and is fully mobile even in complex field environments.



## For ANSI/ASHRAE110-2016 Fume Hood Performance Testing Hardware and Software



### Features:

- ▶ ANSI/ASHRAE 110 is the national standard for chemical fume hood performance testing in the United States. The fume hood performance test kit supplied by D-Industrial is very suitable for the testing of all items in accordance with ANSI/ASHRAE 110-2016 standards;
- ▶ The SF6 ejector was manufactured according to standard drawing # 110-83m;
- ▶ The internal critical orifice is accurately calibrated by the mass flowmeter to ensure the flow rate of 4 L/min;
- ▶ The SF6 Tracer Gas Analyzer Q200 and Mannequin are used for Tracer Gas Test;
- ▶ The Face Velocity Test Kit measures the fume hood face velocity. Test data can be recorded, calculated and exported in real time by professional software.
- ▶ D-Industrial fume hood performance test software guides each step of fume hood performance test, automatically records all original data of fume hood performance test, and finally automatically generates a complete test report;



### SF6 Tacer Gas Analyzer Q200

- ▶ The SF6 tracer gas analyzer Q200 uses advanced ECD sensing technology and can detect at least 0.01ppm SF6. The Q200 response time (T90) is less than 1 second, and the reading can be stabilized at the maximum concentration in less than 2 seconds.

#### Specifications

Sensor	Electron Capture Detector (ECD)
Sample Flow Sensitivity	60 mL/min 0.01
Minimum Detection Limit	ppm
	0.01 ppm
Range	0.00-20.00 ppm
Interface	RS232



### SF6 Ejector Kit

- ▶ The SF6 Ejector kit includes: SF6 ejector, calibrated critical orifice (release flow 4 L/min at 30 psi), special gas pressure regulator, pressure gauge (0 to 60 psi), and quick connector.
- ▶ The SF6 ejector is manufactured according to the ANSI/ASHRAE 110-2016-4.2 Ejector System (FIGURE 4.1 to 4.3). The Orifice was manufactured in accordance with the ANSI/ASHRAE 110-2016-4.3 Orifice parameters, and the release rate of SF6 was controlled to be 4 liters per minute (4 Lpm) at the pressure of 30 psi.



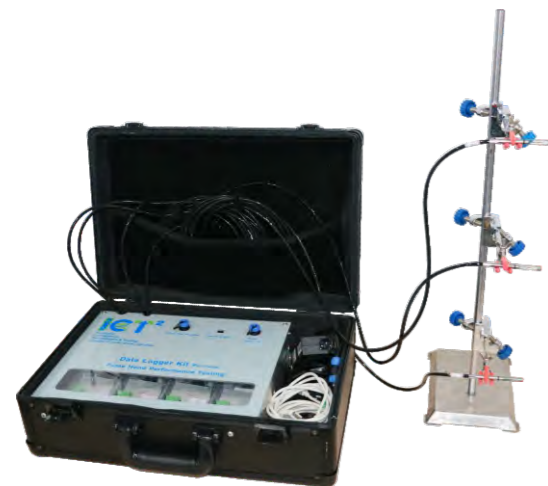
#### Specifications

SF6 Ejector	manufactured according to ANSI/ASHRAE 110-2016-4.2 Ejector System (FIGURE 4.1to 4.3)
Orifice	At 30 psi, SF6 releases at a rate of 4 l/min (4 Lpm)
Gas pressure Regular	Double pressure gauges, suitable for special gases
Pressure Gauge	0 to 60 psi



### Face Velocity Test Kit

- ▶ Four high precision air velocity transducer and high performance data logger are integrated. Through it, the face velocity of the fume hood can be tested quickly without interference, and the data can be automatically recorded, calculated and reported by special software.



#### Specifications

Air Velocity Transducer	Range: 0.15 – 2 m/s Reading accuracy ±3% or (±0.15 m/s)
Data Logger	The full range accuracy is 0.092%, and the acquisition frequency can reach 50000 times/channel/second
Weight	6 kg
Power	Use built-in lithium battery or alternating current

**The Smoke Generator** is mainly used for visualization test of fume hood .It includes a small smoke generator and a large smoke generator. Because testers often face the fume hood when performing tests, extra care should be taken to ensure that the tester's body does not interfere with smoke visualization.

### Local Smoke Generator



- ▶ Safe, non - toxic, non - flammable pharmaceutical - grade smoke oil, specially designed for this smoke machine, can provide high quality safety smoke generation. The rapid diffusion of smoke produced by the smoky oil makes the device suitable for various applications, such as visualization of laboratory airflow patterns. A 500mL smoky oil can provide a total of 250 minutes (over 4 hours) of smoke generation at high smoke production (2mL/min consumption) and 500 minutes (8 hours) of smoke generation at low smoke production (1mL/min consumption).

### Large-Volume Smoke Generator



- ▶ Equipped with 1000W high-power smoke generator and electronic thermostatic control system, it can continuously generate a large amount of white smoke.

### Mannequin

The mannequin kit includes a mannequin, a retractable support frame and a lab coat. The mannequin is compatible with the parameter requirements specified in ANSI/ASHRAE 110-2016.

