Mask Bacterial Filtration Efficiency (BFE) Detector GT-RA02B

Application:

Mask Bacteria Filtration Efficiency Tester,are mainly used for testing the bacterial filtration efficiency performance of masks applicable to metrological verification departments, scientific research institutes, medical mask production units and their related testing departments. It has the characteristics of fast and accurate measurement of the bacterial filtration efficiency of masks [BFE].

The Mask Bacterial Filtration Efficiency (BFE) Detector is composed of a

biological aerosol generating system, aerosol chamber, aerosol delivery device, negative pressure cabinet, and 28.3LPM Anderson sampler. The entire detector is controlled by the control system. The console uses PLC+Labview to coordinate and control the work of the aerosol generation system, transmission system, negative pressure cabinet, and sampling system, and displays the working status in real time, and the entire measurement work is automatically completed.

Standards:

YY 0469 Technical requirements for surgical mask
BS EN 14683 Medical face masks - Requirements and test methods
ASTM F2100 Standard Specification for Performance of Materials Used in Medical Face Masks
ASTM F2101 Standard Test Method for Evaluating the Bacterial Filtration Efficiency (BFE) of Medical Face Mask Materials, Using a Biological Aerosol of Staphylococcus aureus
NBR 15052

Feature

1.Standard test cabinet, touch screen + PLC system is easy to operate.
2.The sampler is Anderson level 6 sampler.
3.The chamber is made of quartz glass with a length of 600mm and a diameter of 80mm
4.The sprayer is made of quartz glass which is corrosion-resistant.
5.The vacuum pump: pumping flow 57L/Min.
6.The test tube holder is made of stainless steel, durable, humanized design, easy to use;
7.Add fixed tooling on the base of the sampler to prevent the sampler from sliding
8.The test cabinet is equipped with exhaust device to keep the negative pressure all the time.

9.The door of the test chamber is equipped with large observation window and operation gloves, so as to observe during the test and operate the test.

Key Specification

Model	GT-RA02B
A Route Sampling Flow	28.3L/min, 0.01L/min
B Route Sampling Flow	28.3L/min, 0.01L/min
Pressure of A Route Sampling Flowmeter	(-5000～0)Pa
Pressure of B Route Sampling	(-5000～0)Pa

Flowmeter	
Pressure of Spray Flowmeter	(0～300)kPa
Vacuum Pump	the maximum flow rate :57LPM; Equipped with silencer, stable air flow, negative pressure: -900pa
Peristaltic Pump Flow	(0.01～3.0)mL/min
Working Temperature	0-50℃
Negative Pressure of Aerosol chamber	Pressure sensor range (-5000~0)Pa, negative pressure can be adjusted, normal operation negative pressure (-500~0)Pa
Negative Pressure of Main Chamber	Pressure sensor range:(-500~0)Pa, negative pressure can be adjusted by fan speed, the maximum negative pressure is about -120Pa
Data Save Ability	Data can be downloaded via U disk with a storage capacity of up to 8G
High Efficiency Particulate Air Filter Properties	≥99.99%@0.3μm,
Median diameter of aerosol generator mass	Average diameter: (3.0±0.3)μm; Geometric Standard Deviation≤1.5
Double Routes 6-lever Andersen Sampling apparatus	Level Ⅰ ＞7μm; Level Ⅱ: (4.7～7)μm; Level Ⅲ: (3.3～4.7)μm; Level Ⅳ: (2.1～3.3)μm; Level Ⅴ: (1.1～2.1)μm; Level Ⅵ: (0.6～1.1)μm
Size of Aerosol Chamber	600×80×5mm (Length×Diameter×Thickness)
Total number of positive quality control sampler particles	(2200±500)cfu
Negative Chamber Flow Speed	≥5m^3/min

Internal dimensions of operation Chamber	740×940×440mm (L×W×H)
Size of Main Machine	1200×650×2100mm (L×W×H)
Power Supply	AC220V±10%, 50Hz
Noise of the Tester	＜65dB(A)
Weight	≈200kg
Power Consumption	＜1500W

Accessories:

Standard Accessories	1set	Air compressor
	12pcs	Petri dish
	1set	Test tube
	3m	Air pipe
	1pc	Measuring cup
	1pc	U disk