

# CINSUN

Stable Reliable Consistent



Horizontal & Vertical Flammability Tester  
**F241**

## F241 Horizontal & Vertical Flammability Tester

### — Material Combustion Performance Characteristics Evaluation

F241 Horizontal & Vertical Flammability Tester, It simulates the early occurrence of fire in the surrounding environment of electronic and electrical products, and uses simulation technology to assess the risk of fire. When there is a fire around the product, it should be ensured that it does not cause combustion spread. The UL94 horizontal and vertical flammability tester is designed to test the flammability of materials for equipment and appliances. Many of the end-use test indicators such as flammability, burning rate, flame spread, combustion strength and flame retardancy of the product can be tested. With the high degree of automation and accurate test data, this is our latest tester for high demanding users, effectively controlling production and verifying product performance.

## F241 Horizontal & Vertical Flammability Tester

1. The horizontal and vertical flammability tester is suitable for testing of electronic and electrical products and parts, components and elements of household appliances, such as the test of the insulated enclosure of household appliances, switch panels, printed circuit boards and other insulating materials, provide data basis for new material research and development, product quality acceptance, etc.

2. The box-type observation window is designed with safety operation port for easy operation and observation test process. Built-in start-up and timing system with adjustable flowmeter can accurately control gas flow. Various angle fixtures are available to meet the actual test requirements of different ignition angles. The illumination system is built in the box for easy observation.



## Standard compliance

GB/T 5169.16 Fire hazard testing for electric and electronic products - Part 16: Test flames 50W, Horizontal and vertical flame test methods;

EC 60695-11-10 Fire hazard testing - Part 11-10: Test flames: Tests for 50 W, Horizontal and vertical flame test;

GB/T 2408-2008 Plastics - Determination of combustion performance - Horizontal method and vertical method;

ASTM D3801 Test method for measuring comparative combustion properties of solid plastics in vertical position;

ASTM D4804 Standard Test Method for Flammability of Non-Hard Solid Plastics;

ASTM D635 Test method for burning and/or spreading rate and burning time of plastics in horizontal state;

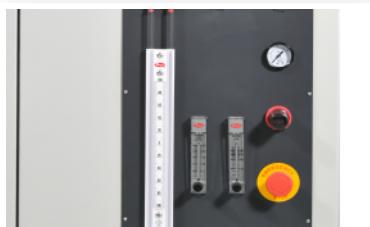
UL94 Equipment and appliance parts plastic material burning test.

## F241 Horizontal & Vertical Flammability Tester — Several Major Features



### Transparent safety door

The heat-resistant glass observation window allows the test to be observed at any time during the test while keeping the test free from external environmental disturbances.



### Automatic ignition, lighting, and exhaust device

The tester can be automatically ignited and timed, and the test box is equipped with a lighting lamp and test exhaust gas exhausting device, which can be multifunctional integrated, convenient and reliable.



### Intelligent touch screen control panel

Microcomputer control system is more efficient and reliable, which can be programmed by 7-inch color LCD touch screen to achieve control, detection, calculation, data display and other functions.



### Angle of blast burner can be adjusted at multiple angles

Various angle burner installation accessories are optional to meet different requirements of users for combustion angle. They are flexible and versatile with high compatibility.



### Moveable sample holder

The sample holder of the tester can move the sample up and down and left and right through the guide rail, which is convenient for sample horizontal or vertical test, convenient operation and improved efficiency.

## F241 Horizontal&Vertical Flammability Tester — Field Application



The instrument is easy to use, high efficiency, adjustable design, stable and reliable. It can make the combustion test in the laboratory safer. It is suitable for flame retardant and safety test of components, parts and components of electronic and electrical products and household appliances.



It is applicable to the performance verification of new products, quality control of the production department, and the of material properties for the third-party testing organization, the product performance verification laboratory, and the quality and technical supervision department, etc.



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## F241 Horizontal & Vertical Flammability Tester — Configuration parameter

■ Standard configuration ■■■



24101

Blast burner



24102

Temperature check block (50W)



24103

Total 20 mesh  
(approx. 20 opening holes per 25mm),  
steel wire with of 0.40mm-0.45mm,  
which can be cut into square  
pieces approximately 125mm.



24104

Temperature sensor



24105

Flame ruler

## F241 Horizontal & Vertical Flammability Tester — Configuration parameter

### Optional Accessories



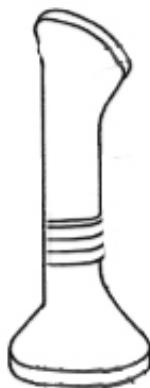
24106

Wooden mat



24107

Cotton pads,  
100% absorbent cotton



24108

Wing light

### Technical Parameters

Enclosure: it is equipped with observation window, internal volume 0.55m <sup>2</sup> , black internal.	Burner tube combustion tube inner diameter of blast burner : 9.5mm
Control screen: intelligent touch	Burning timer: timer (accurate to 0.1s)
Observation window: transparent	Exhaust device: automatic exhaust
Ignition mode: automatic ignition	Burner angle: 20°, 45°, 90° adjustable
Standard flame height: 20±2mm	Weight: 120Kg
Sample fixture: shape 205mm × 76mm (inner frame 152mm × 38mm)	Power supply: 220V 50HZ
	Appearance size: 1500mm×900mm×1200 mm



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