



**YUYANG INDUSTRIAL CO., LIMITED**

China Manufacturer of Fire Testing Equipment

## Easy Operate Lab Testing Equipment Fire Propagation Apparatus FPA ISO 12136



- **Product Details:**

- Place of Origin: **China**
- Brand Name: **YUYANG**
- Certification: **ISO 12136 ASTM E 2058 FM 4910**
- Model Number: **YY402**

- **Payment & Shipping Terms:**

- Minimum Order Quantity: **1 set**
- Price: **Negotiation**
- Packaging Details: **Plywood Box**
- Delivery Time: **35 work days**
- Payment Terms: **T/T L/C Western Union**
- Supply Ability: **3 sets per quarter**
- Share to :

## **ISO 12136 Lab Fire Testing Equipment Fire Propagation Apparatus / FPA**

### **Description:**

This fire-test-response standard determines and quantifies material flammability characteristics, related to the propensity of materials to support fire propagation, by means of a fire propagation apparatus (FPA). The main parameters contains time to ignition, mass loss rate, heat release rate (chemical and convective) and smoke generation rate. The scope of testing is various materials, components and final products as well as many kinds of polymer materials, but not suitable for explosive objects. The test results of flame propagation calorimeter can evaluate specific material flammability, provide the necessary basis for the flame propagation speed and fire growth model, risk assessment, architecture and product design, and materials research and development.

### **Standards:**

ISO 12136 Reaction to fire tests -- Measurement of material properties using a fire propagation apparatus  
ASTM E 2058, FM 4910

### **Structure Characteristics:**

1. 19-inch rack integrated design, elegant, easy to operate;
2. The computer controls the entire testing process; automatic ignition system, automatic measurement of the burning time;

3. Infrared heaters, composed by six 500w quartz lamp;
4. 4-hole ceramic tube ignition;
5. Stainless steel cold water tank,with water flow rate 2.0L / min,and inlet water temperature does not exceed 20 °C;
6. Weighing system: quality measured by the strain gauge load cell tests, accuracy is 0.1g. Equipped with swift electronic weighing parts, mechanical stop device can avoid causing damages when moving, stable results, ensure that the instrument longevity, weighing range 0 ~ 3kg;

### **Ignition System:**

1. 10KV spark ignition,equipped with safety device cease-fire,Ignition will be automatically positioned by connecting to the closing lever mechanism;
2. Automatic ignition system,automatic timing,automatic expiration blowout;

### **Technical Parameters:**

1. Thermopile-type heat flow heat flux meter: range 0~100k W/m<sup>2</sup>,accuracy  $\pm 3\%$ , repeatability  $\pm 0.5\%$ ;
2. Sample weighing range: 0~2000g, accuracy: 0.1g;
3. Paramagnetic oxygen analyzer,concentration range:0~25%,he oxygen analyzer shall be linear response,Britain Servomex oxygen sensor. 10% to 90% response time of less than 12s,output noise does not exceed 50ppm;. Measurement reproducibility lower than 100ppm;
4. Infrared CO<sub>2</sub> analyzer CO<sub>2</sub> range: 0 to 10%; accuracy  $\pm 0.01\%$ ;
5. Exhaust fan flow 0 ~ 50g / s adjustable, precision 0.1g / s;
6. Compressor principle: cold trap: 0 to 5 degrees;
7. Imported diaphragm pump, flow rate: 33 l / min;
8. Standard color detector accuracy  $\pm 5\%$ , output linearity (transmission) <1% absolute transmittance <1%

**The FPA can be used to determine:**

1. Critical heat flux;
2. Thermal Response Parameter(TRP);
3. Effective heat of combustion;
4. Chemical and convective heat release rates;
5. Fire Propagation Index(FPI);
6. Average Corrosion Index;
7. Smoke yield.