

# EY51 Thermal Resistance Tester

## 1.1 Product Description

EY51 thermal resistance tester is more professional, high precision thermal resistance tester, a complete simulation of the human body skin body hotplate, not moldy, easy to clean, simple PC software, easy to use.

Air duct structure can be removed simply, Conform to the standard requirements of static testing and dynamic testing.

## 1.2 Technical Specifications

(RCT)Thermal resistance : 0.002-2.0 m<sup>2</sup>K / W

Repeatability: ≤ ± 2%

Resolution: 0.001m<sup>2</sup>K / W

Test plate temperature range: 30 °C ~ 40 °C adjustable

Temperature control accuracy: ± 0.03 °C

Temperature measurement: ± 0.01 °C

Air velocity: 0 ~ 1.2 m / s continuously adjustable

Air velocity accuracy: ± 1%

The sample platform lift range :0~50mm automatic lift

Sample thickness: 0~50mm

Test plate area: 254mm × 254mm

Guard ring size: 512mm × 512mm

Guard ring width: 127mm

Sample size:500mm\*500mm

Dimensions: 73 × 61 × 350cm (L x W x H) (not including Climate Chamber)

Weight: 45Kg (not including Climate Chamber)

Host power: AC220V ± 10%, 100W or AC110V ± 10%, 100W

Warranty: 24 Months



## 1.3 Testing standards

GB / T 11048, ISO 11092, ASTM F 1868-09, ASTM D 1518-85, JIS L1096-2010, BS8510-2009

## 1.5 Test Principle

Clothing is often made of materials that impede the flow of heat and moisture from the skin to the environment. Consequently, people may suffer from heat stress or cold stress when wearing clothing in different environmental conditions. Therefore, it is important to quantify the thermal resistance and evaporative resistance of clothing materials and to consider these properties when selecting materials for different clothing applications.

## 1.6 Application

Measurement of the thermal resistance, under steady-state conditions, of fabrics, films, coatings, foams.

## 1.7 Configuration

Standard configuration: host test unit, TRT analysis PC software