



## TPP Thermal Protection Tester GT-CN08



### **Application:**

The TPP thermal protection instrument is mainly used to measure the thermal insulation performance of flame-retardant protective clothing fabrics exposed to radiant heat sources and convection heat sources to detect the thermal protection performance of protective clothing, safety shoes, gloves, and helmet outer surfaces.

### **Feature**

- The test equipment shall include the sample holder assembly, the holder of the sample holder assembly, the heat source, the protective cover, the sensor assembly, the recorder, and the gasket. It shall also have a gas source, a gas flow meter, a burner, and a sensor.
- Removable corundum protection board, temperature 1800 degrees, can block the flame and reduce the test error.
- Two 45-degree Meker burners were placed to provide standard convection heat sources with nine quartz tubes.
- Meker burner diameter 38mm, internal hole diameter 5/16 inches, can provide 800-1200 BUT heat output, the burner mouth is a metal mesh structure, the burner lower air valve can be adjusted, adjustable air and flammable gas mixture proportion.
- Nine T150 quartz IR arrays provide thermal radiation flux of  $13-40 \text{ kW/m}^2 \pm 4 \text{ kW/m}^2$ .
- The total heat flux can be set to  $83 \text{ kW/m}^2 \pm 2 \text{ kW/m}^2$  by adjusting the gas supplied to the Meker burner under the heat radiation of a quartz infrared tube.
- The calibration heat flow meter is water-cooled, with a working range of 0-100  $\text{kW/m}^2$  and a maximum range of 150%.
- The response time of the heat flow meter is less than 200ms, the emissivity is greater than 0.95, and the output signal is greater than 5mv in the operating range.
- The copper pan calorimeter device can be used to detect convective heat and radiant heat, while detecting the temperature of the back of the specimen.
- The rotameter can adjust the flow of combustion gas with an accuracy of  $\pm 2\%$  and a range of more than 3L/min.
- The pointer pressure gauge, the inlet pressure can be adjusted through the pressure reducing valve, the pressure relief valve has a range of 0-15psi.
- A quarter turn plug can manually shut off the flammable gas.
- The temperature acquisition system has a resolution of  $0.1^\circ\text{C}$  and an accuracy of  $\pm 0.75^\circ\text{C}$ .
- The data acquisition speed of the automated data acquisition system is sub-/0.05 second and cold junction compensation is provided for thermocouple measurement data.
- Equipped with computers and printers, comes with standard test software and provides standard test curves.

Model	GT-CN08
Climate Requirements	Propane and compressor air
Test Environment	$25 \pm 5^\circ\text{C}$
Holding Way	Pneumatic or manual
Power Supply	220V 50Hz 15A
Dimensions	1500×540×460mm ((W×H×D)
Weight	86kg
Standards	NFPA 1971, ASTM D4018, GB 8965.1-2009, ISO 17492, GA etc.

