

**Product Name :**  
Computerized Stefan Boltzman Apparatus

**Product Code :**  
CHINAELABC262006



**Description :**

Computerized Stefan Boltzman Apparatus

**Technical Specification :**

**FEATURES:**

Experiments in vacuum  
Heat transfer by radiation  
Determination of the radiation coefficient  
Determination of the heat quantity transferred by convection  
Determination of the heat transfer coefficient based on measured values  
Experiments at ambient pressure or positive gauge pressure  
Heat transfer by convection and radiation  
Theoretical determination of the heat transfer coefficient based on the Nusselt number  
Comparison of the heat transfer in different gases  
Heat transport between heating element and vessel wall by convection and radiation  
Heating element

**SPECIFICATION:**

Pump for vacuum generation  
Power consumption: 250W  
Nominal suction capacity: 5m<sup>3</sup>/h  
Final pressure with gas ballast: 3\*10<sup>-3</sup>mbar  
Final pressure without gas ballast: 3\*10<sup>-3</sup>mbar  
Output: 20W  
Radiation surface area: approx. 61cm<sup>2</sup>

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Pressure vessel :

Pressure: -1...1,5bar

Volume: 11L

Measuring ranges :

Negative pressure:  $0,5 \cdot 10^{-3}$ ...1000mbar

Pressure: -1...1,5bar rel.

Temperature: 0...250°C

Power: 0...23W

Required for Operation :

230V, 50Hz, 1 phase

230V, 60Hz, 1 phase; 120V, 60Hz, 1 phase



**Engineering Lab China**