

**Product Name :**  
Astra Scientific Computerized Boiling Heat Transfer Apparatus

**Product Code :**  
HeatMassLab0001



**Description :**

Astra Scientific Computerized Boiling Heat Transfer Apparatus

**Technical Specification :**

The Computerized Boiling Heat Transfer Apparatus consists of an Transparent process tank makes it possible to clearly observe the evaporation process at the heated cylinder. The cylinder is used as a model to demonstrate a fire tube heated from the inside.

An integrated water-cooled condenser allows for a continuous boiling process. The special liquid used evaporates at low temperatures. Sensors provide all relevant data. The measured values are indicated on digital displays and can also be transmitted directly to a PC via USB

**FEATURES:**

- Experimental unit to demonstrate evaporation in a steam boiler fire tube
- Processing of measured values on a PC using software

- Operation with environmentally friendly, special low-boiling liquid
- Observing different forms of evaporation (nucleate, film boiling)
- Calculation of heat transfer coefficient
- Effect of temperature and pressure on the evaporation process
- Digital displays for measured values
- Lab VIEW software for data acquisition via USB through PC

**SPECIFICATION:**

- Heater Power: 250W, continuously adjustable

Surface area: 0,001875m<sup>2</sup>

- Cooler, copper coil

Diameter: 80mm

Surface area: 0,0578m<sup>2</sup>

- Safety valve opens at 2,2bar
- Tank: 10L
- Measuring ranges

Pressure: 0...4bar absolute

Flow rate: 0,05...1,8L/min

Temperature thermocouple: 0...200°C

- Required for Operation

230V, 50/60Hz, 1 phase, 120V, 60Hz/CSA, 1 phase

Water supply and drain



## Astra Scientific

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