Product Name :	**Product Code :**
Heat Transfer Teaching Equipment	ALABS-A143-014

Description :

Heat Transfer Teaching Equipment

Technical Specification :

Heat Transfer Teaching Equipment

A bench top service unit designed to interface to a range of heat transfer accessories.

Provides a variable, stabilised 0-24V DC supply to the heater of the heat transfer accessory, with a current capability of 9A.

Provides a drive signal for a proportioning solenoid valve used for flow control.

Provides a control signal to a variable speed blower used for generating airflow.

10 temperature inputs and conditioning circuits for K-type thermocouples:

9 off, 0-133°C, resolution <0.1°C

1 off, 0-500°C, resolution <0.15°C

Instrumentation inputs for heater voltage, heater current, air flow, water flow, radiation and light meter.

Integral USB interface, and educational software for all accessories.

Outputs can be controlled manually from the front panel, or controlled by the software from a user supplied PC.

Watchdog circuit for operator and equipment safety in case of computer or interface failure when being controlled remotely.

Easy interfacing to 3rd party software e.g. LabView, MatLab.

A comprehensive instruction manual describing how to carry out the laboratory teaching exercises in non-steady state heat transfer and their analysis as well as assembly, installation and commissioning is included.

Features:

Small-scale, benchtop equipment

Common service unit avoids unnecessary cost duplication for control and instrumentation

Multiple accessories available covering a wide range of heat transfer investigations

Computer control of heaters, water flow, air flow, with safety functions implemented to allow for remote operation

Improved accuracy for quantitative results which can be related directly to theory

Integral USB interface