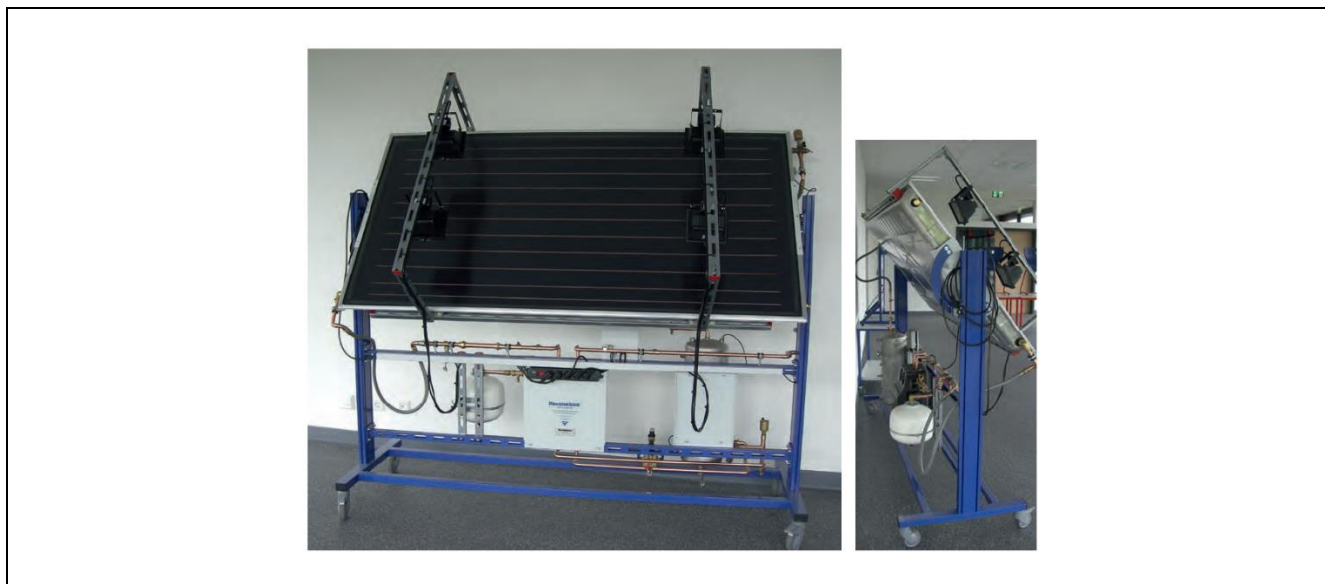


SOLAR THERMAL ENERGY GENERATION LAB TRAINER KIT

MODEL: ELS-SOLARTHERMAL



a) **INTRODUCTION**

The new ELS Solar Thermal Energy Lab Trainer Kit provides a safe learning environment for students to learn multiple disciplines required to understand the operation of a Solar Thermal hot water heating system with a Solar PV powered control system.

This module is purposely designed to address the interests of construction, plumbing, renewable energy or any other program wishing to build an awareness of Closed-Loop, Drain Back Solar Thermal systems. This system comes complete in kit form with a 20 lesson student manual to become familiar with the various components, assembly, system operations, system start-up, and design.

The Solar Thermal Lab Trainer Kit includes everything required to build the Solar Thermal System Kit. The module provides student instruction, in teams of two, for up to 30 hours.

The Lesson Plan includes an Instructor's Guide which provides instructions for, setting up, and implementing the module. It also includes learning outcomes, testing and evaluation procedures, answer keys, student skills response and inventory list.

The Student Activity manual guides students through 20 multi-disciplinary activities using the tools, and equipment included with the module package. It also contains 5 enrichment and career exploration activities to further strengthen the students' awareness.



ELS ENERGY AND LAB SOLUTIONS SDN BHD (Co. No. 1255110-D)

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b) **THERMAL SOLAR SYSTEM**

This system enables to study the set-up and function of a thermal solar system for the provision of hot water. It explains the settings, the adjusting possibilities and operation. As we consequently integrated original components of real systems, the imparted knowledge could be easily transferred into practice.

Integrated connectors for meter and opening at all relevant points enable the collection of parameters like collector feed and collector supply, tank temperature and system pressure. The operation of the system bases on temperature differences. To keep the model independent from weather and time of day, it could optionally be equipped with a light unit. The standard product is equipped with a plastic tank. On demand an approximately 10 L water tank or a stainless steel tank with approximately 20 L and layering measurement could be integrated.

c) **TECHNICAL DETAILS**

- Dimensions (approx.): 1250 x 1080 x 800 mm (W x H x D)
- Weight (approx.): 105 kg
- Electrical Connection: 240V/50Hz AC (single phase)

d) **WARRANTY**

- 1 year



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