



### GENERAL EXPLANATION

In solar cells, the surface temperature is higher than 80 °C, yield decreases. It is possible to solve this problem by placing a hot water panel on the cell bottom surface. In this way both efficiency increase and hot water need are met.

### EXPERIMENTS

1. Calculation of solar cell instantaneous electrical capacity
2. Finding solar cell efficiency
3. Experimental study of solar cell angle dependent of current-angle change
4. Finding momentary thermal forces in the flat panes
5. Flat panel efficiency in different positions
6. Finding the flat panel thermal power change depending on the temperature
7. Transition of solar energy to heat energy
8. Measuring the effect of the circulation pump on the flat panel on the heating rate

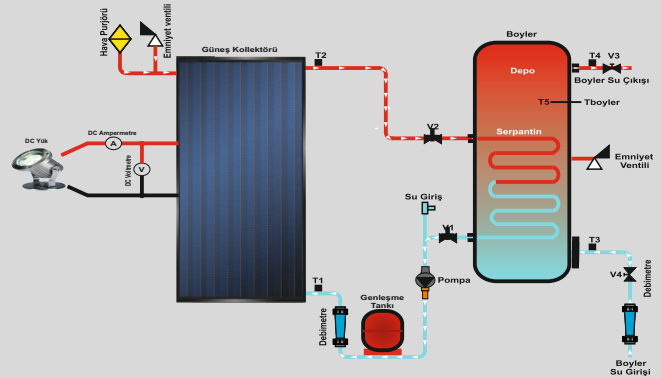
### DIMENSIONS

Control Panel  
A x B x H : 930 x 490 x 1460 mm

Boiler  
A x B x H : 1173 x 1050 x 2100 mm

### TECHNICAL SPECIFICATION

PVT means 'photovoltaic thermal'. PVT, which is an integrated solar energy system, meets both electric and hot water needs. In photovoltaic panels, it is necessary to remove the excessive heat load generated by solar radiation which can not be converted to electricity. For this reason, photovoltaic thermal (PVT) systems are designed. With PVT systems, both the excess heat load can be removed from the photovoltaic material and this energy can be utilized as heat.



### TECHNICAL DETAILS

- Single serpentine boiler
- Expansion tank
- Pump
- Solar collector
- Flowmeter
- Air purge
- Safety valve

### OPTIONAL FEATURES

- Touch LCD Display
- USB Computer Connection
- Computer Control

### PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog