



SUMMARY INFORMATION SHEET

FSEC # 00600

Certification Date: 15-FEB-13

MANUFACTURER

Company KIOTO Clear Energy

Address Carretera El Verde - El Castillo 2000, Letter A El Salto, Jalisco Mexico

Collector Model

Solpal L

This integral thermal storage system was tested by the Florida Solar Energy Center (FSEC) in accordance with the prescribed method and was found to meet the minimum standards established by FSEC. The purpose of the tests is to verify initial performance conditions and quality of construction only. The resulting certification is not a guarantee of long term performance or durability.

INTEGRAL COLLECTOR STORAGE SOLAR SYSTEM DESCRIPTION

Gross Length	2.159 meters	7.08 feet
Gross Width	1.067 meters	3.5 feet
Gross Depth	.212 meters	.696 feet
Gross Area	2.425 square meters	26.1 square feet
Transparent Frontal Area	2.154 square meters	23.19 square feet
Volumetric Capacity	200 liters	52.8 gallons
Weight (empty)	70 kilograms	154 pounds
Test Pressure	552 kPa	80.1 Psig
Number of Cover Plate	1	

MATERIALS

Enclosure	Aluminum frame
Glazing	Textured Glass
Absorber	Stainless steel tank
Absorber Coating	Black Paint
Insulation	Polyurethane

THERMAL PERFORMANCE

A performance test was conducted outdoors in accordance with the FSEC Integral Collector Storage System Test Method. The data was used to develop a TRNSYS model for the system. The model was then used to calculate the performance under a set of standard weather conditions and loads. Total solar energy available for the standard day is 5045 Watt-hour/m² (1600 Btu/ft²) of solar energy, a 22 °C (71.6 °F) air and water temperature and a 11.75 kilowatt hour (40 120 Btu) load.

Net Energy Delivered (QNET): 6.07 kWh 20710 Btu

Heat Loss Coefficient (L):

12.159 W/°C 23.1 Btu/hr°F

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