



# SopoFlare™ MicroCSP™ Rooftop Mountable System



## SOPOGY - THE TOTAL SOLAR SOLUTION

Sopogy Inc. is a Hawaii-based company with a mission to invent, manufacture and sell the world's most innovative and affordable concentrating solar power collectors. Our company strives to become part of the solution to global problems. These issues include climate change, energy security and sustainability.

Sopogy is dedicated to helping our customers achieve their renewable energy goals. Using our solar energy concentrator we help maximize energy production while minimizing costs.

## ADVANTAGES

- Reduce Your Energy Cost
- Create Revenue Streams
- Lower Emissions
- Qualify for Renewable Energy Certificates
- Benefit from Tax Credits and Incentives

## SOPOFLARE™ HIGHLIGHTS

Applications:

- Desalination
- Process Heat
- Solar Cooling

Roof Mounted Racking Systems  
Retrofit Capabilities

MicroCSP Solutions By:

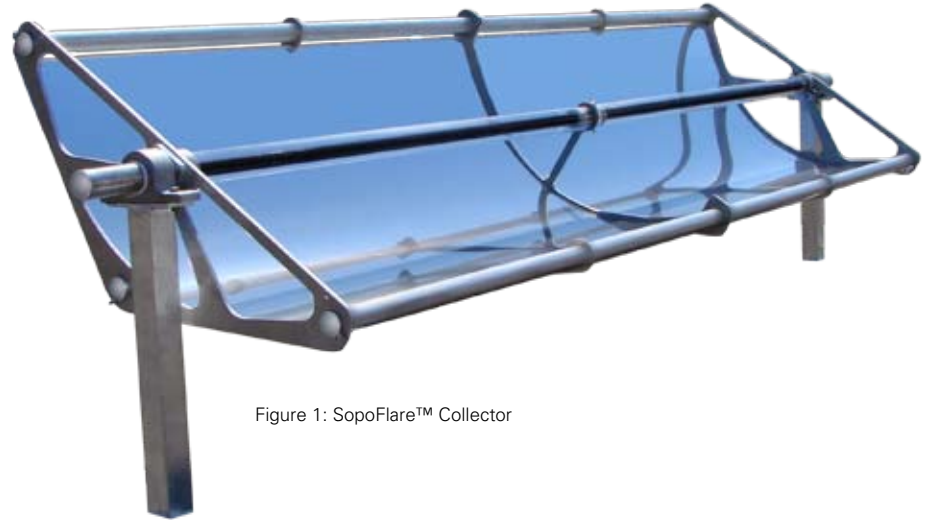


Figure 1: SopoFlare™ Collector

## Overview

Sopogy has pioneered the concept of MicroCSP™ bringing concentrated solar power to industrial and utility facilities. These systems have a small footprint and lightweight design while providing highly efficient electrical and thermal power generation from a renewable and sustainable fuel, solar energy.

SopoFlare™ is a rooftop mountable system which can be used for process heat or solar cooling applications. In addition, SopoFlare™ can be integrated into existing systems to minimize traditional energy consumption and increase energy efficiency. Our unique design, combined with our proprietary assembly racks, enables our customers for an easy assembly of the SopoFlare™ collectors on rooftops.

The system consists of a scaled down version of Sopogy's parabolic trough that is able to follow the sun from east to west during the course of the day using our proprietary tracking controls. Individual SopoFlare™ collectors can be custom designed to fit existing rooftops and minimize the number of tracking systems needed.

## Features and Benefits

### Features:

- Powered by renewable solar energy
- No emissions
- Automated system control and monitoring
- Produces temperatures as high as 150–250° F (66–121° C)
- Stow Mode

### Benefits:

- No fossil fuel payments
- Federal Solar Tax Credits
- Federal Accelerated Depreciation
- State Tax Credits
- One energy input, multiple energy outputs
- Low price point

Hawaii Solar Solutions Center: 2660 Waiwai Loop · Honolulu, HI 96819 · ph: (866) 767-6491 · fax: (808) 356-0565  
West Coast Solutions Center: 1735 Technology Drive, Suite 400 · San Jose, CA 95110 · ph: (408) 660-1212 · fax: (408) 351-8883

[www.sopogy.com](http://www.sopogy.com) | Printed on Recycled Stock

# SopoFlare™ MicroCSP™

## Rooftop Mountable System

### COLLECTOR - General Data\*

Description	Units (Metric)	Units (Standard)
Collector Length	2.44 m	8 ft
Collector Width	0.76 m	2.50 ft
Total Collector Area	1.85 m <sup>2</sup>	20 ft <sup>2</sup>
Collector Reflective Area	2.47 m <sup>2</sup>	26.66 ft <sup>2</sup>
Heat Collection Element O.D.	23.4 mm	1 inch
Heat Transfer Fluid Capacity	0.722 liter	0.224 gal
Recommended Flow Rate	22.7-45.4 liter/min	6-12 gal/min
Operating Temperature Ranges	66-121° C	150-250° F
Collector Weight	11.33 kg	25 lb
Focal Length	208.28 mm	8.2 inch
Ambient Operating Temperatures	-10 to 50 ° C	14-122 ° F
Maximum Wind Speed (stowed)	110.4 km/h	68 mph
Maximum Wind Speed (tracking)	169.9 km/h	105 mph
Useful Life Expectancy	15 years	15 years

### OPTICAL EFFICIENCY

Description	Value
Receiver Absorptivity	0.87
Mirror Reflectivity	0.938
Receiver Emittance (@ 400° C / 752° F)	0.23

### SOLAR COLLECTOR PERFORMANCE

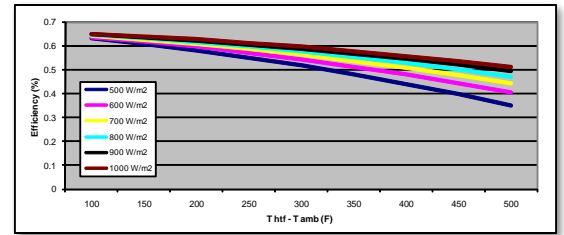
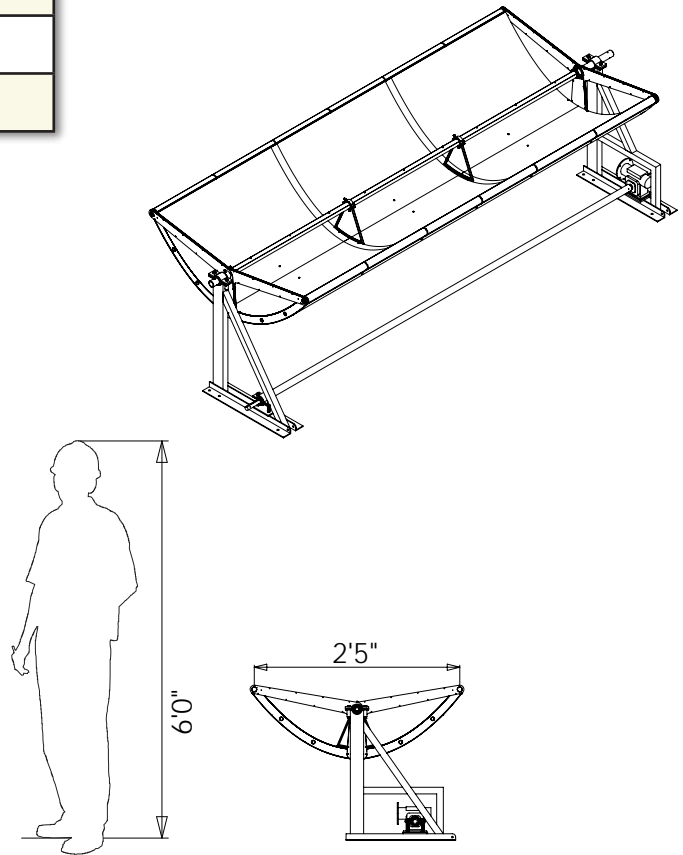
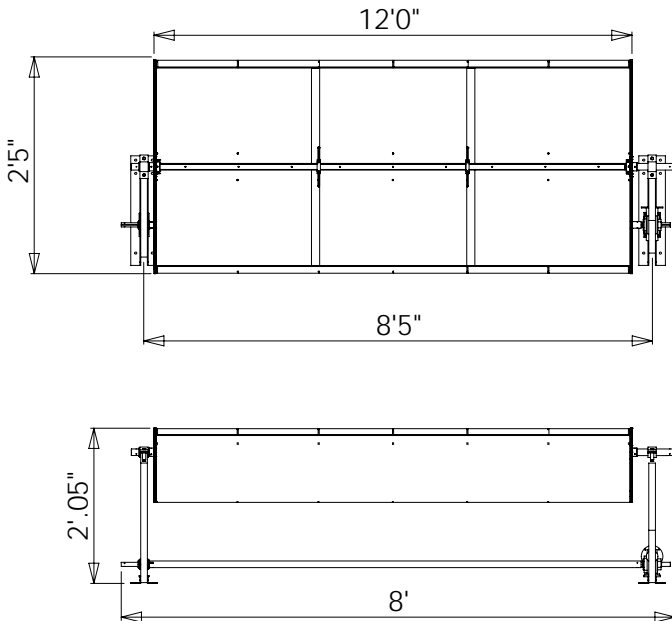


Figure 2: Instantaneous Collection Efficiency

\* General data subject to change



Hawaii Solar Solutions Center: 2660 Waiwai Loop · Honolulu, HI 96819 · ph: (866) 767-6491 · fax: (808) 356-0565  
 West Coast Solutions Center: 1735 Technology Drive, Suite 400 · San Jose, CA 95110 · ph: (408) 660-1212 · fax: (408) 351-8883

[www.sopogy.com](http://www.sopogy.com) | Printed on Recycled Stock

© 2009 Sopogy Inc. All Rights Reserved. Sopogy Inc. reserves the right to change or modify specifications included in this datasheet without notice or obligation to equipment previously sold or in the process of construction

SPO-09-000009