



The SunDrum™ Collector

Harness The Power Of The Sun

The SunDrum™ Collector captures the sun's energy in ways never before possible.

The SunDrum™ Collector combines solar electric and hot water technology to create the world's first compact solar energy collector.

SunDrum™ Collectors

Triple System Efficiency

A typical PV cell is ~15% efficient in converting the sun's energy into useful energy. Combining the SunDrum™ collector with the PV panel ~60% of the sun's energy can be utilized.

Sun Drum™ collectors easily attach to existing PV panels, cooling the PV panel to improve electrical efficiency ~10%, i.e. from 15% to 16.5% while capturing thermal energy for heating hot water.

Thermal energy collection efficiency is greater than 40%.

Domestic Hot Water is the #2 residential Energy Load

A typical home uses 20-40% of its energy supply to create hot water. Using the sun to heat domestic hot water significantly offsets the cost of electricity, oil, or natural gas.

System Savings

A 2kW SunDrum-enabled hybrid system in a 5 ESH zone:

- achieves payback in <10 years, under 5 years in some areas
- has lifetime energy savings exceeding \$100,000 assuming an average of 5 ESH (where 1 ESH = 1000Wh/m²)
- reduces energy cost from ~30¢/kWh to ~14¢/kWh at 6ESH without incentives

Environmental Benefits

A 2kW SunDrum-enabled hybrid system in a 5 ESH zone can:

- save greater than 5 tons of CO₂ annually
- replace over 150 gallons of heating oil annually
- reduce dependence on foreign energy imports



Rear View of Evergreen “Spruce” panel with SunDrum™ collector installed.



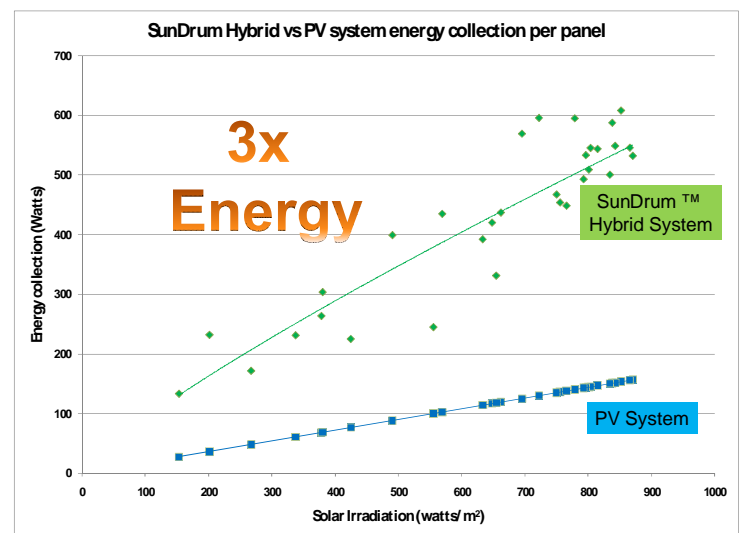
Features

- ✓ Designed for closed systems with glycol mix in freeze-prone areas
- ✓ Flexible orientation
- ✓ Minimized external connections
- ✓ Low cost PEX plumbing
- ✓ Flexible hose connection system
- ✓ No additional space required
- ✓ No special tools required

Technical Specifications

- Dry weight: 25 pounds
- Fluid Inlets: ½ inch pipe thread
- Maximum operating pressure: 6 PSI
- SRCC Certification: (pending)
- UL Certification: (pending)

Performance Data
(Massachusetts, March 2008)



Empirical System data validates SunDrum Solar's claims of improved energy conversion efficiency. Note: Solar irradiation data calculated from PV power measurements.

For more information see www.sundrumsolar.com or email info@sundrumsolar.com

All specifications subject to change without notice.