

TS-425 **PLACING POWER** **IN YOUR HANDS**

TS-425 - Heat and Power in One System

TS-425 is a robust and reliable solar system comprising 16 modules with a total of 480 high-efficiency solar cells. The grid-connected generator provides a long-term high-yield power source. Our rigorous quality control and in-house testing facilities guarantee Carpe SOLAR's modules meet the highest quality standards possible.

Technology advantages of Carpe SOLAR

- CPV - Concentrated Photovoltaic AC efficiencies that reach >25% (2x traditional PV)
- Heat harvest of > 40% and total energy yield of 65-70%
- Collectors focus the energy of 1,000 suns in an area the size of your thumbnail (same energy intensity as the exhaust from a Titan rocket launching the Space Shuttle)
- Energy density conserves space, packing energy output of conventional PV in less than half the area
- Unique configuration reduces installation and maintenance costs
- Proprietary tracking yields high accuracy, built-in error correction, and long-term reliability
- Technologies unique to Carpe Solar (10 patents pending)

Carpe SOLAR: Cogeneration

Carpe SOLAR produces both electricity and hot water from the sun's energy in a single high-efficiency generator, setting a new standard for renewable energy.

Carpe SOLAR delivers the highest energy efficiency in the world at over 70%. (That means we harvest 70% of the sun's energy that projects on a Carpe SOLAR generator... a typical flat panel PV system is 15% efficient).

Thus, Carpe SOLAR is able to deliver renewable energy more efficiently at a lower cost than utility rates to residential, commercial, and government customers.

Applications

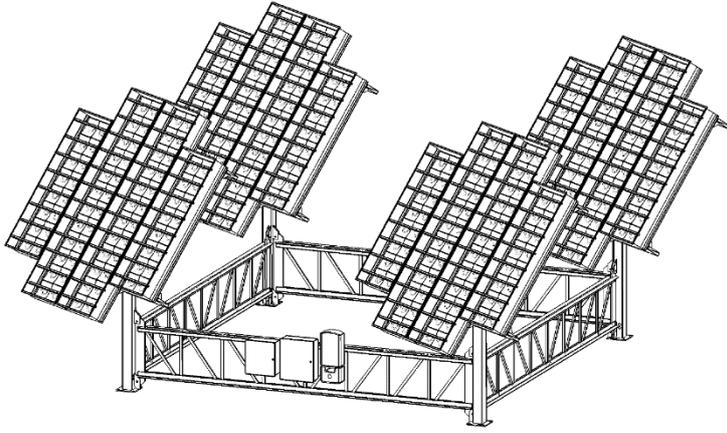
- Grid-connected commercial and large residential
- Domestic and commercial hot water
- Water distillation

Product Features of Carpe SOLAR

- HCPVT- High Concentration Photovoltaic Thermal in a single generator unit
- Tracker maximizes output, eliminating errors from installation, weather, and wear
- Compact, modular assembly pre-wired/pre-plumbed
- Minimal land preparation needed
- Easy integration into customer mechanicals
- Rapid maintenance with no special skills/equipment

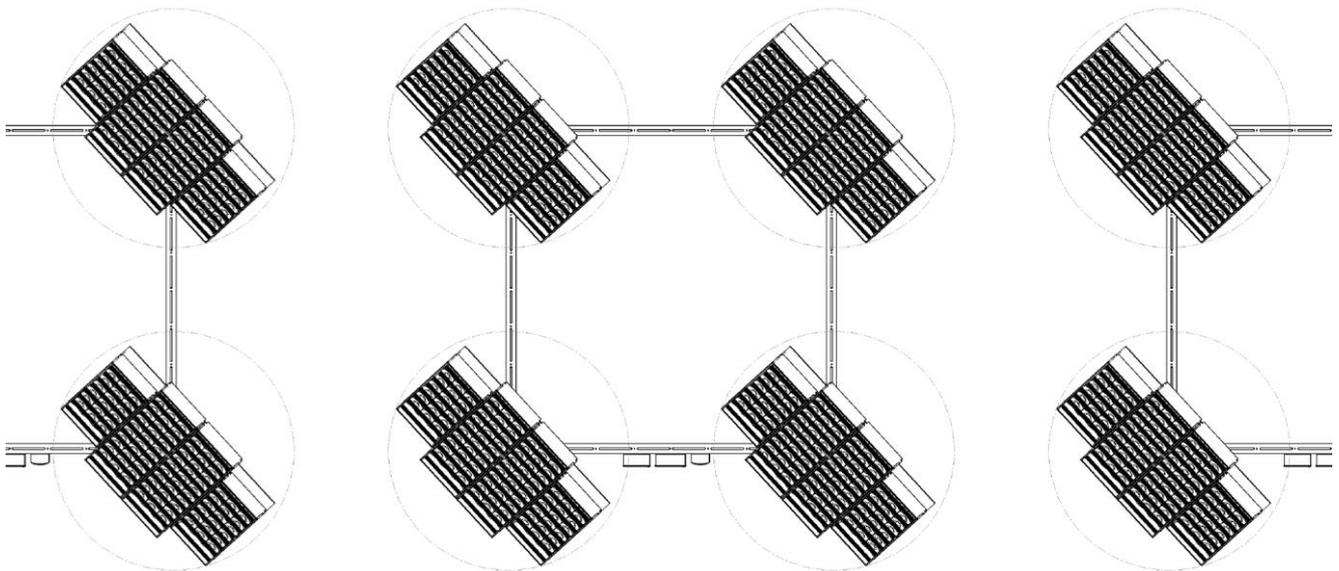
TS-425 Generator

Technical Data



Overall Dimensions* (LxWxH)	29 ft x 29 ft x 14.5 ft minimum 36 ft x 36 ft x 14.5 ft typical
Weight	7,000 lbs (approx. – not incl. water)
Cell Type Cells per Generator	III-V Multi-junction Cell, 8.7 x 8.7mm 480
Total Power Output**	25 kW
Electrical	11 kW
Thermal	14 kW

Top View



* Actual spacing between posts and between adjacent generators is heavily dependent on site location (latitude) and other factors

** Data referenced to 1000 W/m² DNI at AM 1.5 Spectra, 25° C ambient temperature

SRCC Certification Testing currently underway to determine performance under specified conditions