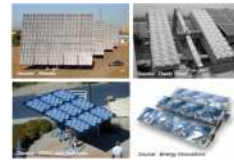
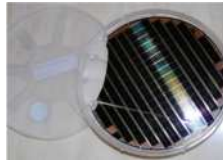


Lilium Energy Inc. Models hcpv-t5k, hcpv-t7k, hcpv-t10k

HCPV Solar Power Generation Station



Primary Products of TaiCrystal International:

- Germanium Solar Cell Substrates for both space and terrestrial applications
- HCPV Solar Cell Receivers
- HCPV Modules
- HCPV System

Standard Power System



Standard Equipment

Tracker (Detailed Spec)	Module (Detailed Spec)
a. Suitable System : 5~10kW	a. Module type : Concentrator
b. Maximum Module Area : 55m ²	b. Power rating : >218W (DNI: 900W/m ²)
c. Tracking precision : < 0.1 °	c. Module Efficiency : >30%
d. Tracker type : Dual axial	d. Operation Temperature : -10°C ~ +50°C
e. Maximum Module Number : As designed	e. Dimension : 1000mm x 861mm x 265mm
f. Tracker weight : about 1600 kg	f. Module Weight : 26 kg

Standard Power System Examples

Suitable Systems	5kW	7.5kW	10kW
Number of Modules	24 sets	36 sets	48 sets
Total Power Generation (@DNI: 900W/m ²)	>5232W	>7560W	>10464W
Total Module Weight	624kg	936kg	1248kg
Tracker Weight	1600kg	1600kg	1600kg
Area Needed	22m ²	33m ²	45m ²
Tracker Controller	With tracker	With Tracker	With Tracker
DNI Meter	Optional	Optional	Optional
DC Power Box	Optional	Optional	Optional
Monitoring System	Optional	Optional	Optional

Tracker (Details)



Specification of Tracker	
Max peak capacity	Approx. 10kW (depends on module power)
Max module surface	48~55 m ²
Tracking technology	Dual Axis
Material of structure	Aluminum , zinc galvanized steel
Position precision (Elevation/Azimuth)	≤0.2 / ≤0.1
Spec of Azimuth Drive	24VDC 3000rpm 58:1 0.6~7A
Azimuth rotation drive	worm gear worm shaft DC motor
Azimuth angle	0°~270°
Dynamic load capacity of azimuth drive (including frame)	5000kgs
Spec of elevation drive	DC 24V 2500~3200rpm 1.8~4.6mm/sec stroke: 24~36 inch actuator
Dynamic load capacity of elevation drive (including frame)	2600kgs
Wind stand wind maximum 70 deg	17.1 m/s (A gust of Beauport scale 12)
Wind stand wind maximum 0 deg	28.4 m/s (A gust of Beauport scale 12)
Weight without frame foundation	1600kgs
Warranty	18 months on actuator and DC motor 20 years on mechanical failure

Module (Details)



HCPV Module Specs @ STC (DNI: 900W/m ² , 25°C)	
Cell Units per Module	42
DC Module Efficiency	> 30%
DC Power (@DNI: 900W/m ²)	>218W
Voltage at MPP (Vmp)	114.66V
Current at MPP (Imp)	1.9A
Open-circuit Voltage (Voc)	133.14V
Short-circuit Current (Isc)	1.99A
Dimensions	1000mm x 861mm x 265mm
Acceptance Angle	± 0.55°
Geometric Concentration	1200X
Weight	26 kg
HCPV Module Operation & Warranty	
Limited Product Warranty	5 Year
10 Year Power Output	92%
20 Year Product Output	80%
Operation Temperature Range	-10°C ~ +50°C
Designed Lifetime	25 Year

Note : STC (Standard Test Condition) announced by NREL