

CPVRS 072 is a fully integrated 7,2 m² solar aperture 2,16 kWp CPV system.

It is designed to be assembled at decentralised facilities and shipped to the field as a single unit, thus optimizing logistics and minimizing installation and commissioning costs.

It includes triple junction high efficiency cells and concentration optics, allowing for DC 30% system efficiency on STC conditions.



Main characteristics

- CPVRS super-module assembly system, allowing for decentralized manufacturing.
- Receiver panels using CPVLIS laminated interconnection system.
- Pole mounted tracker using high accuracy actuators and stepper motors. Continuous tracking system. Using hybrid tracking strategy and MISPS module integrated sensor.
- Advanced ICPVS tracking technology: Horizontal internal fixed tube and maintenance free polymer bearings. Possibility of aerial electrical connection.
- Can be installed by driving pole into the ground. Very cheap process for large installations, as it is done using automated equipment. Low environmental impact as can be dismantled using the same machines. Very efficient and cheap to install in multi MW solar farms.
- For small installations concrete foundations can also be used.
- Can be easily installed on top of flat rooftops.
- Available in low voltage (LV) and high voltage (HV) configurations.

CPVRS 072 Specifications

Solar aperture:	7,2 m2
Concentration ratio:	800x
Cell size:	5,3 mm square
Focal length:	233 mm (F 1,1).
Lens size:	150 mm square
Lens composition:	SOG panel composed of 4x5 lenses, 620x770 mm.
Panels per system:	16
Cells per system:	320
Elevation span:	0/90 degrees
Azimuth span:	0/360 degrees

Performance

	CPVRS-072-LV		CPVRS-072-HV	
	STC	NOC	STC	NOC
Isc:	5,36 A	4,89 A	2,68 A	2,44 A
Voc:	500 V	469 V	1000 V	939 V
Imp:	4,93 A	4,45 A	2,46 A	2,22 A
Vmpp:	440 V	412 V	879 V	824 V
FF:	79 %	79 %	79 %	79 %
Pmpp:	2.162 W	1.833 W	2.162 W	1.833 W
Efficiency:	30 %	28 %	30 %	28 %

(STC: Tcell 25 C / DNI 1000 W/m2, NOC: Tcell 70 C / DNI 900 W/m2)

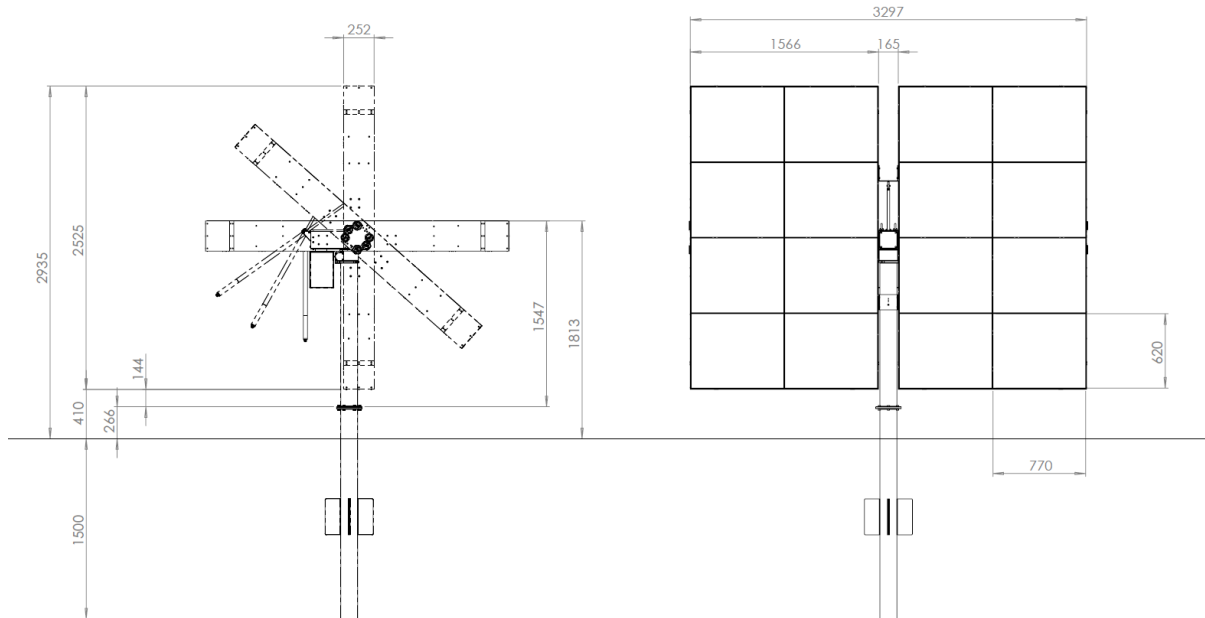
Dimensions

Width:	3.297/3.297 mm
Depth:	1.317/2.525 mm
Height:	2.935/1.813 mm
Weight:	406 kg

Land requirements

	Minimum	Typical
Footprint:	18 m2	30 m2
Power density:	120 W/m2	72 W/m2
1 MW plant size:	0,83 Ha	1,39 Ha

Drawings



CPVRS 072 is based on a set of proprietary patent pending technologies.
This is a preliminary brochure. Its contents are pending full verification.