

Technical Specifications

TYPE	
MODEL	QUADSUN CPV CHP 33-500
COMBINED HEAT & POWER	
MODEL	QUADSUN CPV CHP 33-500
COMPONENTS	
Receiver	Y
Concentrator	Y
• Chassis	Y
• Mirrors	Y
• Tracker	Y
Cooling system	Y
System controller	Y
Field controller	Y
SYSTEM OUTPUTS	
Electrical output (DC)	1 KW DC @1000W/m ² and 20°C ambient
Voltage	500 V DC
Current	2 A
Thermal output	2.3 KW @1000W/m ² and 20°C ambient
Hot water output	500 ltrs/day
Module efficiency (electrical DC)	25.0%
Optical efficiency	78%
Combined heat & power efficiency (DC)	75%
Max temperature	-
Max pressure	-
SYSTEM PHYSICAL DATA	
Weight	90 kg
L x B x H	2.1 x 2.5 x 1.8
Mirror surface area (Precision optics solar grade)	4.2 m ²
Receiver area	55 cm ²
OPERATING CONDITIONS	
Ambient temperature	-20 to 60°C
Relative humidity	0-100%
Wind speed *	15 m/s
Survival wind speed	40 m/s
RECEIVER TECHNICAL DATA	
Cell efficiency	33.85% at 800x concentration
Max operating temperature	90°C
Power degradation	< 0.2% per year
Power degradation with temperature	0.1% /K
Module certifications	MNRE (IEC pending)
SYSTEM CONNECTIONS	
Input power	24V DC Max 50 W
Communications	CAN Bus
TRACKER SPECIFICATION	
Azimuth	0-300°
Elevation	0-90°
Motors	Stepper motors (closed loop control with tracking algorithms)
WARRANTY**	
10 year generation	Max 10% below rated power
20 year generation	Max 20% below rated power
Product	5 years (for workmanship & other defects)
OPERATIONS AND MAINTENANCE	
Mirror and coolant	Regular cleaning of mirror and top-up of coolant

* Move to safe position if >15m/s

** Please see detailed warranty documents