

GENERAL	
Tracking Range	120° (-60° to +90°)
Tracking System	Single axis
Panel Orientation	Z-Landscape
ZL Benefits	Higher bifacial gains, optimized shading, rotation around center of gravity
Tracker Size	Tracker length ranges between 8-24 modules
Ground Coverage Ratio	GCR 30-65%
Modules Supported	All available modules
Energy Gain vs. Fixed Tilt	Up to 25%, site specific
Tracker Output	Up to 13 kW DC
Slope Tolerance	N-S: up to 30% E-W: any slope
String Voltage	Compatible with any string size

TRACKER CONTROL / HARDWARE AND INSTRUMENTATION	
Drive Unit	Three gear cascade - planetary, worm, chain
	Overall reduction ratio ~13,000:1
	Drive system - stepper motor
Tracker Control Unit (TCU)	Proprietary controller
	<b>Option 1:</b> Self-powered tracker 20-50V, Li-ion 11.1V 40Wh battery Battery protection <span style="margin-left: 100px;"><b>Option 2:</b> Grid version, 20-30V</span>
Tracker Power Consumption	Idle: 1.5W    Standard motion: 5W    Maximum: ~15W ~14kWh/year/tracker
Control Electronics	One MCU (Master Control Unit) per cluster and one TCU (Tracker Control Unit) per tracker
Drive Unit	Weight: 8 kg (17.6 lbs.)

TRACKER CONTROL / SOFTWARE AND ALGORITHMS	
Tracking and Algorithms	Backtracking Smart Backtracking Diffuse Optimization Intermittency Mitigation Dirt Minimization Algorithm
Tracking Accuracy	± 2°

TRACKER CONTROL / SOFTWARE AND ALGORITHMS (Continued)	
Agricultural Control Monitoring	SCADA integration with crop models
Stow	Nighttime stow: configurable, prevents dust accumulation Dynamic stowing based on weather conditions
Communication Architecture / SCADA	MODBUS over Ethernet or wired RS485 to third-party SCADA <b>SolarGik proprietary SCADA solution - optional</b>
Monitoring	Portal interface displaying tracker status and generation, performance, weather and irradiance data
Tracker Control Unit (TCU)	WiFi 2.4 GHz or WiFi Mesh 2.4 GHz

TRACKER CONTROL / SENSORS	
Agricultural Systems	Plant-level sensors
Weather System	Irradiance: GHI (default) GTI, RH, BM, temperature (optional)
	Wind speed (default) Wind direction (optional)
	Snow sensor (site dependent)
Camera System	Fish-eye cloud camera (optional) HD & IR camera (optional)

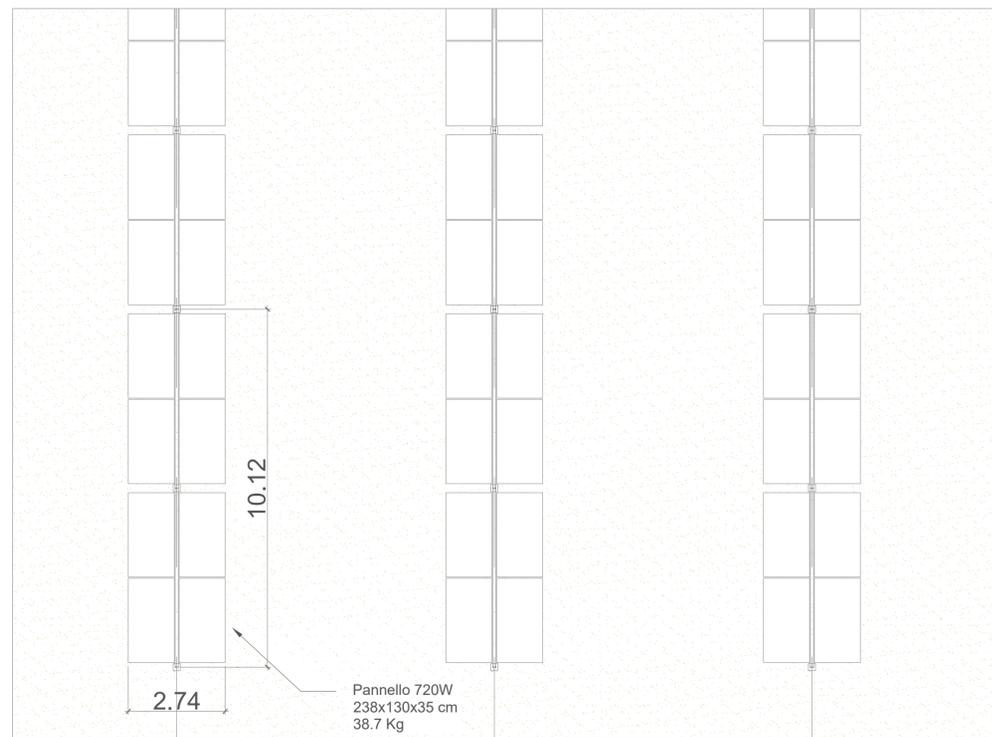
STRUCTURAL	
Total Length	Between 14.5-28.4m (47.5-93.2 ft)
Tracker Weight	25-30 kg/kW
Axis Height	Site specific
Tracker Body	Standard profile
	2 support beams per module
Tracker Mounting	I shape
	4-7 poles per tracker 300-450 poles per MW (typical)
Materials	Galvanized steel

ENVIRONMENTAL	
Design Wind Speed	ASCE 7-22 Standard operating wind load 145-185 kmh (90-115 mph) Special design 240 kmh (150 mph)

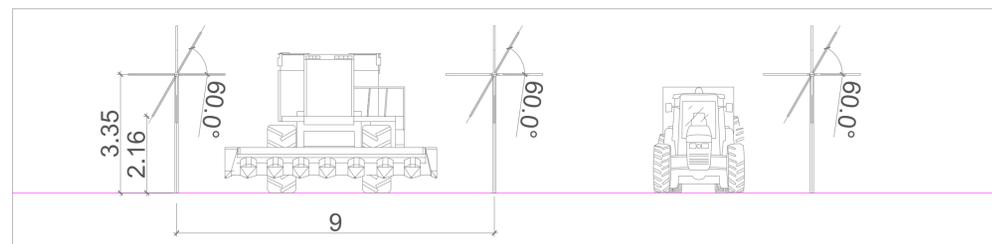
ENVIRONMENTAL (Continued)	
Temperature Range	Operation: -25°C to 50°C (-13°F to 122°F) Survival: -40°C to 60°C (-40°F to 140°F)
Snow Load	Tailored to site requirement

STANDARDS AND CERTIFICATIONS	
Standards and Certifications	ANSI, NEMA, NFPA, IEC, UL, CE

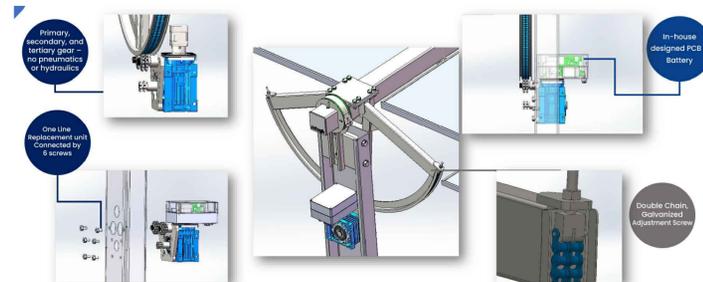
INSTALLATION, SERVICES, MAINTENANCE & WARRANTY	
Maintenance	Zero maintenance design (regular maintenance not required)
Installation Requirements	No fabrication required
Warranty	10-year Structural 5-year Drive Unit



Strutture a inseguimento monoassiale tipo SolarGik  
Scala 1:100



Sezione strutture a inseguimento monoassiale tipo SolarGik  
Scala 1:100



Dettagli strutture a inseguimento monoassiale tipo SolarGik



Immagine strutture a inseguimento monoassiale tipo SolarGik

### Himalaya G12 Series 700-720W

132-cell Bifacial HJT Solar Half Cell Module

Engineering Drawings		Electrical Characteristics (STC*)					
Unit: mm		HS 210-8132	D5700	D5705	D5710	D5715	D5720
Maximum Power (P <sub>max</sub> )	700W	705W	710W	715W	720W		
Module Efficiency (%)	22.53%	22.70%	22.86%	23.02%	23.18%		
Optimum Operating Voltage (V <sub>mp</sub> )	42.10V	42.25V	42.39V	42.54V	42.68V		
Optimum Operating Current (I <sub>mp</sub> )	16.63A	16.69A	16.75A	16.81A	16.87A		
Open Circuit Voltage (V <sub>oc</sub> )	50.13V	50.29V	50.44V	50.59V	50.74V		
Short Circuit Current (I <sub>sc</sub> )	17.43A	17.49A	17.55A	17.61A	17.67A		
Operating Module Temperature	+25 to +85 °C						
Maximum System Voltage	DC 1500V (IEC)						
Maximum Series Fuse	30A						
Power Tolerance	0 to +5W						
Bifaciality	85% ± 5%						

BISTC**		Mechanical Characteristics				
Maximum Power (P <sub>max</sub> )	770W	775W	780W	785W	790W	
Optimum Operating Voltage (V <sub>mp</sub> )	42.10V	42.25V	42.39V	42.54V	42.68V	
Optimum Operating Current (I <sub>mp</sub> )	18.29A	18.35A	18.41A	18.46A	18.51A	
Open Circuit Voltage (V <sub>oc</sub> )	50.13V	50.29V	50.44V	50.59V	50.74V	
Short Circuit Current (I <sub>sc</sub> )	19.37A	19.22A	19.28A	19.33A	19.38A	

Temperature Characteristics		Safety & Warranty	
Normal Operating Cell Temp. (NOCT)	44.0 ± 1.2 °C	Safety Class	Class II
Temperature Coefficient of P <sub>max</sub>	-0.26%/°C	Product Warranty	15 yrs Workmanship
Temperature Coefficient of V <sub>oc</sub>	-0.24%/°C	Performance Warranty	30 yrs Linear Warranty*
Temperature Coefficient of I <sub>sc</sub>	0.04%/°C	*Less than 1% attenuation in the 1st year, the annual attenuation from the 2nd year to 30 years shall not exceed 0.57%, and the power to be less than 80% after the 30th year.	

Shipping Configurations	
Container Size	HC
Pallets Per Container	47
Modules Per Pallet (pcs)	18
Modules Per Container (pcs)	31
Modules Per Container (pcs)	558

Scheda pannello Huasun Himalaya G12 - 720W



PROGETTO PER LA REALIZZAZIONE DEL NUOVO PARCO AGRI-NATURALISTICO-VOLTAICO DELL'ALTA MURGIA E DELLE RELATIVE OPERE DI CONNESSIONE ALLA RTN LOCALITA' MASSERIA CAPUTI  
COMUNE DI MINERVINO MURGE (BAT)  
DENOMINAZIONE IMPIANTO - PVA005 MINERVINO - MASSERIA CAPUTI  
POTENZA NOMINALE 55 MW

**PROGETTO DEFINITIVO - SIA**

PROGETTAZIONE E SIA	AGRONOMIA E STUDI COLTURALI
<b>HOPE engineering</b> ing. Fabio PACCAPELO ing. Andrea ANGELINI arch. Gaetano FORNARELLI dott.ssa Anastasia AGNOU	dott.ssa Lucia PESOLA
<b>INSERIMENTO PAESAGGISTICO</b> <b>Studio ALAMI</b> Arch. Fabiano SPANO Arch. Valentina Marta RUBRICH Arch. Susanna TUNDO	<b>STUDI SPECIALISTICI E AMBIENTALI</b> MICROCLIMATICA dott.ssa Elisa GATTO ARCHEOLOGIA dott.ssa Domenica CARRASSO GEOLOGIA Apogeo Srl ACUSTICA dott.ssa Sabrina SCARAMUZZI FAUNISTICA dott. Fabio Mastropasqua

**EG.4 LAYOUT IMPIANTO**

**EG.4.7 Particolari tipologici : strutture a inseguimento monoassiale**

REV.	DATA	DESCRIZIONE
02-24		prima emissione

Scala 1:100

