

► SUN2000-330KTL-H1

Smart String Inverter

For APAC, LATAM & EUROPE



Max. Efficiency
≥ 99.0%



Smart Connector-level Detection (SCLD)



Smart Self-cleaning Fan (SSCF)



IP66 Protection



MBUS Supported



Smart String-level Disconnection (SSLD)

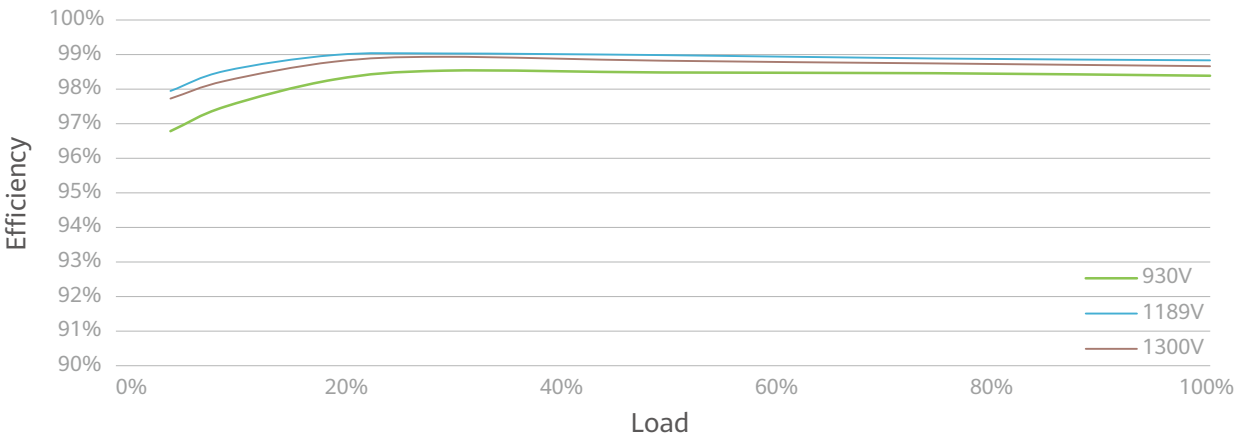


Smart IV Curve Diagnosis Supported

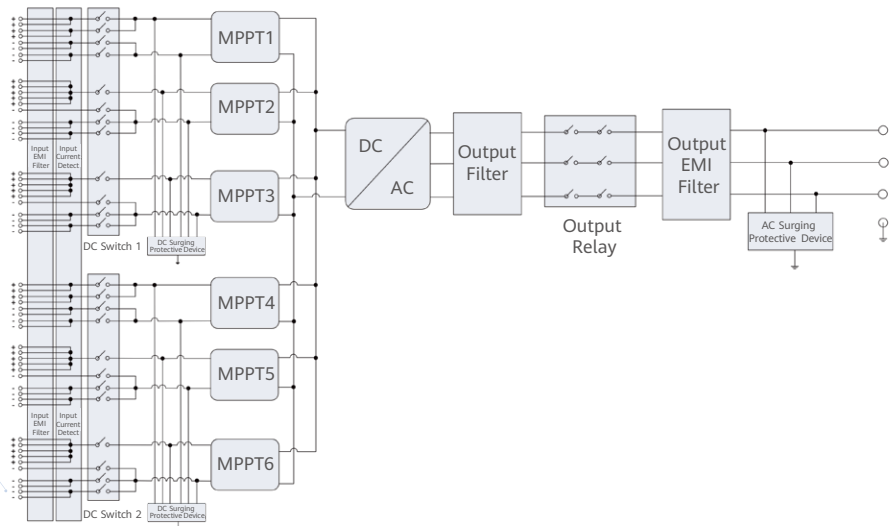


Surge Arresters for DC & AC

Efficiency Curve



Circuit Diagram



Technical Specifications

Efficiency	
Max. Efficiency	≥ 99.03%
European Efficiency	≥ 98.8%
Input	
Max. Input Voltage	1,500 V
Number of MPPT	6
Max. Current per MPPT	65 A
Max. Short Circuit Current per MPPT	115 A
Max. PV Inputs per MPPT	4/5/5/4/5/5
Start Voltage	550 V
MPPT Operating Voltage Range	500 V ~ 1,500 V
Nominal Input Voltage	1,080 V
Output	
Nominal AC Active Power	300,000 W
Max. AC Apparent Power	330,000 VA
Max. AC Active Power (cosφ=1)	330,000 W
Nominal Output Voltage	800 V, 3W + PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	216.6 A
Max. Output Current	238.2 A
Adjustable Power Factor Range	0.8 LG ... 0.8 LD
Total Harmonic Distortion	THDi < 1% (Rated)
Protection	
Smart String-level Disconnection (SSLD)	Yes
Smart Connector-level Detection (SCLD)	Yes
AC Overcurrent Protection	Yes
DC Reverse-polarity Protection	Yes
PV-array String Fault Detection	Yes
DC Surge Arrester	Type II
AC Surge Arrester	Type II
DC Insulation Resistance Detection	Yes
Residual Current Detection Unit	Yes
Communication	
Display	LED Indicators, WLAN + APP
USB	Yes
MBUS	Yes
RS485	Yes
General	
Dimensions (W x H x D)	1,048 x 732 x 395 mm
Weight (with mounting plate)	≤ 112 kg
Operating Temperature Range	-25°C ~ 60°C
Cooling Method	Smart Air Cooling
Max. Operating Altitude without Derating	4,000 m
Relative Humidity	0 ~ 100% (Non-condensing)
DC Connector	HH4SMM4TMSPA / HH4SFM4TMSPA
AC Connector	Support OT / DT Terminal (Max. 400 mm²)
Protection Degree	IP 66
Anti-corrosion Protection	C5-Medium
Topology	Transformerless
Standards Compliance	
IEC 62109-1/-2, IEC 62920, IEC 60947-2, EN 50549-2, IEC 61683, etc.	

Hi-MO X10 Guardian Anti-Glare

LR7-72HVH 640~670M

- Suitable for glare-sensitive scenarios such as airports, highways, and residential households
- Use high-transparency and low-reflection glass to enhance the anti-glare effect
- Peak efficiency with top power generation performance
- TaiRay wafer & BC technology enhances high product reliability

15

15-year Warranty for
Materials and Processing

30

30-year Warranty for Extra
Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730

ISO9001:2015: ISO Quality Management System

ISO14001: 2015: ISO Environment Management System

ISO45001: 2018: Occupational Health and Safety

IEC62941: Guideline for module design qualification and type approval

LONGI



24.8%
MAX MODULE
EFFICIENCY

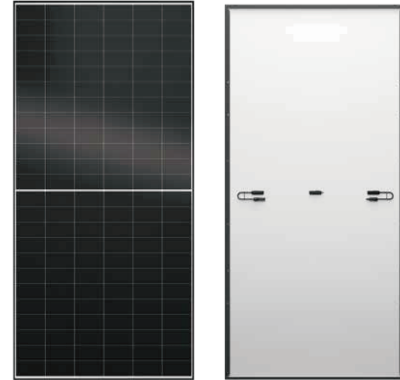
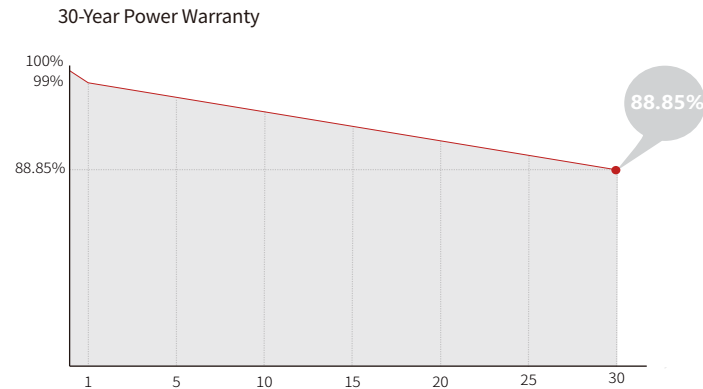
0~3%
POWER
TOLERANCE

<1%
FIRST YEAR
POWER DEGRADATION

0.35%
YEAR 2-30
POWER DEGRADATION

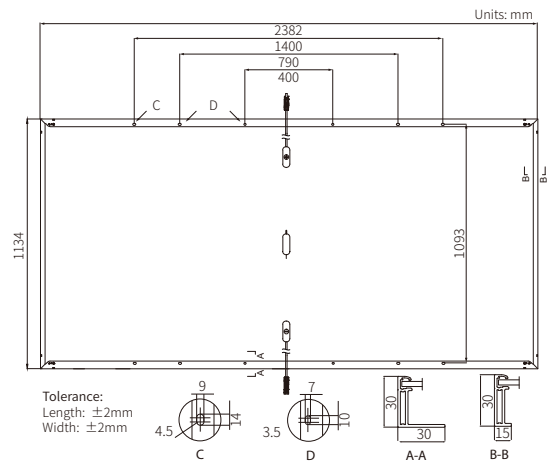
BC-CELL
LOWER OPERATING
TEMPERATURE

Additional Value



Mechanical Parameters

Cell Orientation	144 (6×24)
Junction Box	IP68, three diodes
Output Cable	4mm ² , +400, -200mm/±1400mm length can be customized
Glass	Single glass, 3.2mm anti-glare coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	28.5kg
Dimension	2382×1134×30mm
Packaging	36pcs per pallet / 144pcs per 20' GP / 720pcs per 40' HC



Electrical Characteristics

 STC : AM1.5 1000W/m² 25°C

 NOCT : AM1.5 800W/m² 20°C 1m/s

Test uncertainty for Pmax: ±3%

Module Type	LR7-72HVH-640M		LR7-72HVH-645M		LR7-72HVH-650M		LR7-72HVH-655M		LR7-72HVH-660M		LR7-72HVH-665M		LR7-72HVH-670M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	640	487	645	491	650	495	655	499	660	502	665	506	670	510
Open Circuit Voltage (Voc/V)	53.70	51.04	53.80	51.13	53.90	51.23	54.00	51.32	54.10	51.42	54.20	51.51	54.30	51.61
Short Circuit Current (Isc/A)	15.13	12.15	15.21	12.22	15.29	12.28	15.37	12.34	15.45	12.41	15.52	12.47	15.60	12.53
Voltage at Maximum Power (Vmp/V)	44.36	42.15	44.46	42.25	44.56	42.35	44.66	42.44	44.76	42.54	44.86	42.63	44.96	42.73
Current at Maximum Power (Imp/A)	14.43	11.56	14.51	11.63	14.59	11.69	14.67	11.76	14.75	11.82	14.83	11.88	14.91	11.94
Module Efficiency(%)	23.7		23.9		24.1		24.2		24.4		24.6		24.8	

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	IEC Class C

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

Temperature Ratings (STC)

Temperature Coefficient of Isc	+0.050%/°C
Temperature Coefficient of Voc	-0.200%/°C
Temperature Coefficient of Pmax	-0.260%/°C

**ALL THE GREAT THINGS
ARE SIMPLE.**



**STRUTTURA A TERRA REGOLABILE
PER PENDENZE ACCENTUATE**

ADJUSTABLE GROUND
MOUNTING SYSTEM
FOR STEEP SLOPES



**BREVETTO INTERNAZIONALE
INTERNATIONAL PATENT**

DISPONIBILE NELLE VARIANTI A MONO E DOPPIO PANNELLO* CON DIVERSE INCLINAZIONI

Mono and double panel available versions*, with different inclinations and orientations

- ✓ Evita scavi e plinti in calcestruzzo
- ✓ Tracciatura minima
- ✓ Non richiede attrezzature speciali
- ✓ Installabile su pendii non raggiungibili dalle macchine battipalo
- ✓ Montaggio semplice e rapido
- ✓ Tenuta immediata
- ✓ Resistente ed affidabile
- ✓ Applicabile su tutti i tipi di terreno, anche in presenza di sassi o pietre
- ✓ Ideale su cave o discariche bonificate

- ✓ No concrete footing
- ✓ Minimum marking
- ✓ No special equipment is required
- ✓ Installable on slopes where pile drivers can't work
- ✓ Quick and easy mounting
- ✓ Immediately resistant
- ✓ Strong and reliable
- ✓ Applicable on all types of soil, and in the presence of stones and boulders
- ✓ Ideal on quarries or landfills



APPLICAZIONI

La struttura regolabile con dispositivo di ancoraggio estensibile permette di installare moduli fotovoltaici su **pendenze accentuate** da 10° a 40° di inclinazione circa, come nel caso di installazioni in zone collinari e montuose dove il terreno presenti un andamento irregolare, anche su più direzioni. Ideale anche per installazione su terreni con profondità limitata, come le **discariche**, grazie alla ridotta invasività della fondazione (profondità media: 50 cm)

INSTALLAZIONE RAPIDA E SEMPLICE DELLA STRUTTURA

- 1) Posizionare i supporti verticali con inclinazione predeterminata utilizzando gli appositi distanziali (è sufficiente la sola tracciatura del punto di partenza e di arrivo di ogni vela).
- 2) Alloggiare i profili orizzontali per il supporto dei moduli all'interno delle staffe presenti sulla parte superiore dei supporti verticali.
- 3) Portare a livello ciascuno dei supporti verticali utilizzando i fori presenti per regolare l'estensione dell'ancoraggio.
- 4) Concludere l'installazione della struttura infilando gli inserti di ancoraggio nelle apposite guide saldate alla base dei supporti verticali, ed infiggendoli nel terreno mediante l'impiego di un martello elettropneumatico.

CERTIFICAZIONI

Disponibili su richiesta certificazioni su calcoli strutturali, sistema di fondazione, materiali impiegati e protezione superficiale.

APPLICATIONS

The structure with adjustable legs and integrated anchoring device allows the installation of solar power plants on **steep slopes** with an inclination varying between 10 and 40 degrees. Perfect for installation on hill and mountain areas where the soil presents unevenness in many directions.

Also ideal for installations on areas with limited penetrability, such as **landfills** thanks to the reduced foundation invasiveness (average depth: 50 cm).

QUICK AND EASY STRUCTURE INSTALLATION

- 1) Place the vertical supports with predetermined inclinations by employing an appropriate spacer (marking the starting point and end point of each array is sufficient).
- 2) House the horizontal profiles into the brackets welded on the top of the vertical supports.
- 3) Place each vertical support at the right level using the holes in order to adjust the legs with the anchoring system.
- 4) Complete the structure installation driving the inserts into the ground through the guides welded at the base of the vertical supports, using an electro-pneumatic hammer.

CERTIFICATIONS

Certifications about structural calculations, foundation systems, materials used and surface protection available on request.

LA SOLUZIONE IDEALE SIA PER PICCOLI IMPIANTI CHE PER PARCHI FOTOVOLTAICI UTILITY-SCALE

Ideal both for small installations and for utility scale solar power plants