

Hi-MO 6

Explorer

LR5-72HTH 560~580M

- Suitable for Distribution Market
- Simple design embodies modern style
- Better energy generation performance
- High-quality module guarantees long-term reliability

15

15-year Warranty for
Materials and Processing

25

25-year Warranty for Extra
Linear Power Output

Complete System and Product Certifications

IEC 61215, IEC 61730, UL 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



22.5%
MAX MODULE
EFFICIENCY

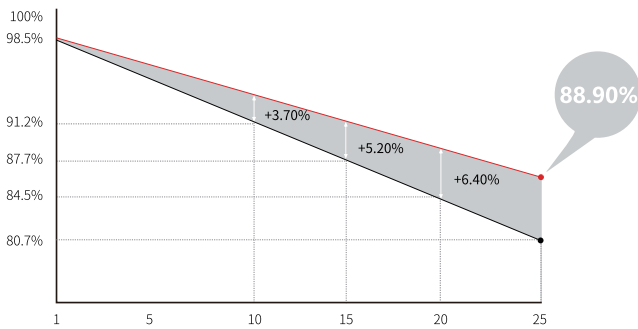
0~3%
POWER
TOLERANCE

<1.5%
FIRST YEAR
POWER DEGRADATION

0.40%
YEAR 2-25
POWER DEGRADATION

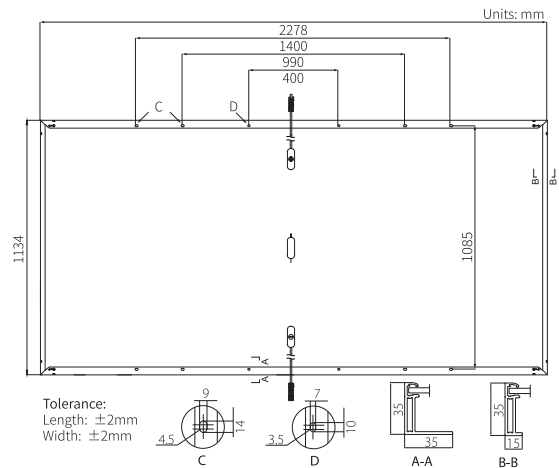
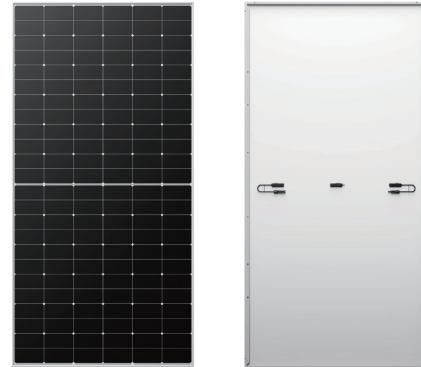
Additional Value

25-Year Power Warranty



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 coated tempered glass
Frame	Anodized aluminum alloy frame
Weight	27.5kg
Dimension	2278×1134×35mm
Packaging	31pcs per pallet / 155pcs per 20' GP / 620pcs 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	LR5-72HTH-560M		LR5-72HTH-565M		LR5-72HTH-570M		LR5-72HTH-575M		LR5-72HTH-580M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	560	418	565	422	570	426	575	430	580	433
Open Circuit Voltage (Voc/V)	51.61	48.46	51.76	48.60	51.91	48.74	52.06	48.88	52.21	49.02
Short Circuit Current (Isc/A)	13.94	11.26	14.01	11.31	14.07	11.36	14.14	11.42	14.20	11.47
Voltage at Maximum Power (Vmp/V)	43.46	39.66	43.61	39.79	43.76	39.93	43.91	40.07	44.06	40.20
Current at Maximum Power (Imp/A)	12.89	10.55	12.96	10.61	13.03	10.67	13.10	10.72	13.17	10.78
Module Efficiency(%)	21.7		21.9		22.1		22.3		22.5	

Operating Parameters

Operational Temperature	-40°C ~ +85°C
Power Output Tolerance	0 ~ 3%
Voc and Isc Tolerance	±3%
Maximum System Voltage	DC1500V (IEC/UL)
Maximum Series Fuse Rating	25A
Nominal Operating Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	UL type 1 or 2 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	-0.230%/°C
Temperature Coefficient of Pmax	-0.290%/°C



Product Service

Attestation of Conformity

No. N8A 099333 0066 Rev. 13

Holder of Certificate: **LONGi Green Energy Technology Co., Ltd.**
No. 388, Middle Hangtian Road
Chang'an District
710100 Xi'an City, Shaanxi
PEOPLE'S REPUBLIC OF CHINA

Product: **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**
Mono-Crystalline Silicon Photovoltaic Module

This Attestation of Conformity is issued on a voluntary basis according to the Low Voltage Directive 2014/35/EU relating to electrical equipment designed for use within certain voltage limits. It confirms that the listed equipment complies with the principal protection requirements of the directive and is based on the technical specifications applicable at the time of issuance. It refers only to the particular sample submitted for testing and certification. For details see: www.tuvsud.com/ps-cert

Test report no.: 704061700516-21

Date, 2022-07-01

(Zhulin Zhang)

Page 1 of 2

After preparation of the necessary technical documentation as well as the EU declaration of conformity the required CE marking can be affixed on the product. The declaration of conformity is issued under the sole responsibility of the manufacturer. Other relevant EU-directives have to be observed.



Product Service

Attestation of Conformity

No. N8A 099333 0066 Rev. 13

Model(s):

LR6-72HV-xxxM, (xxx=335-360 in step of 5)
 LR6-60HV-xxxM, (xxx=280-300 in step of 5)
 LR6-72PH-xxxM, (xxx=340-380 in step of 5)
 LR6-60PH-xxxM, (xxx=285-315 in step of 5)
 LR6-72HPH-xxxM, (xxx=365-395 in step of 5)
 LR6-72HIH-xxxM, (xxx=365-395 in step of 5)
 LR6-60HPH-xxxM, (xxx=300-325 in step of 5)
 LR6-60HIH-xxxM, (xxx=300-325 in step of 5)
 LR6-72OPH-xxxM, (xxx=385-415 in step of 5)
 LR6-60OPH-xxxM, (xxx=335-365 in step of 5)
 LR6-72HPH-xxxMC, (xxx=375-390 in step of 5)
 LR6-60HPH-xxxMC, (xxx=305-325 in step of 5)
 LR4-72HPH-xxxM, (xxx=420-465 in step of 5)
 LR4-72HIH-xxxM, (xxx=420-465 in step of 5)
 LR4-60HPH-xxxM, (xxx=350-380 in step of 5)
 LR4-60HIH-xxxM, (xxx=350-380 in step of 5)
 LR4-72ZPH-xxxM, (xxx=420-435 in step of 5)
 LR4-60ZPH-xxxM, (xxx=350-365 in step of 5)
 LR6-60ZPH-xxxM, (xxx=330-355 in step of 5)
 LR4-78ZPH-xxxM, (xxx=455-485 in step of 5)
 LR5-72HPH-xxxM, (xxx=525-555 in step of 5)
 LR5-66HPH-xxxM, (xxx=480-505 in step of 5)
 LR4-66HPH-xxxM, (xxx=395-415 in step of 5)
 LR4-66HIH-xxxM, (xxx=395-415 in step of 5)
 LR5-72HIH-xxxM, (xxx=525-550 in step of 5)
 LR5-66HIH-xxxM, (xxx=480-505 in step of 5)
 LR5-78HPH-xxxM, (xxx=575-595 in step of 5)
 LR5-78ZPH-xxxM, (xxx=565-585, in step of 5)
 LR4-50HPH-xxxM, (xxx=305-320, in step of 5)
 LR4-66HTB-xxxM, (xxx=410-430 in step of 5)
 LR4-60HTB-xxxM, (xxx=370-390 in step of 5)
 LR5-54HPH-xxxM, (xxx=395-415 in step of 5)
 LR4-66HTH-xxxM, (xxx=420-440 in step of 5)
 LR4-60HTH-xxxM, (xxx=380-400 in step of 5)
 LR5-54HIH-xxxM, (xxx=395-415 in step of 5)
 LR5-72HTH-xxxM, (xxx=555-600 in step of 5)
 LR5-54HTH-xxxM, (xxx=420-450 in step of 5)
 LR5-54HTB-xxxM, (xxx=410-440 in step of 5)
 xxx stands for rated output power at STC

Parameters:

Fire Safety Class: Class C according to UL790
 Safety Class: Class II
 Maximum System Voltage: 1500V DC
 Test Laboratory: Yangzhou Opto-Electrical
 Products Testing Institute.
 No.10 West Kaifa Road, Yangzhou
 225009 Jiangsu, P.R. China
 Construction: Framed, with Junction box, cable and

connector.

Tested according to:

EN IEC 61730-1:2018
 EN IEC 61730-1:2018/AC:2018-06
 EN IEC 61730-2:2018
 EN IEC 61730-2:2018/AC:2018-06

Page 2 of 2

After preparation of the necessary technical documentation as well as the EU declaration of conformity the required CE marking can be affixed on the product. The declaration of conformity is issued under the sole responsibility of the manufacturer. Other relevant EU-directives have to be observed.

CE Declaration of Conformity

February 18th, 2022

Manufacturer: LONGi Green Energy Technology Co., Ltd.
Address: No. 388 Middle Hangtian Road, 710100 Xi'an City, Shaanxi, PRC
Product: Photovoltaic (PV) Module
Brand: LONGi
Model(s):

- LR4-60 ZZZ XXX M LR4-66 ZZZ XXX M LR4-72 ZZZ XXX M
- LR5-54 ZZZ XXX M LR5-66 ZZZ XXX M LR5-72 ZZZ XXX M
- LR6-60 ZZZ XXX M LR6-72 ZZZ XXX M

ZZZ stands for module type (HIH, HIB, HIBD, HPH, HBD, HPB, HTH, HTB)
XXX indicates module nameplate power in Watt.

LONGi Solar Technologie GmbH herewith confirms that its PV modules comply with the requirements set out in the European Union Directive 2014/35/EU (Low Voltage Directive – LVD) for the electrical equipment used in certain voltage limits and 2014/30/EU (Electromagnetic Emission – EMI). For the evaluation of the conformance with these Directives, the following IEC standards were applied:

- IEC 61215-1:2016 (Terrestrial PV modules - Design qualification and type approval)
- IEC 61730-1:2016 (Photovoltaic (PV) module safety qualification)

based on: report 704061700516-X issued by TÜV Süd for 1.500 V monofacial products
 report 704061802022-X issued by TÜV Süd for 1.000 V monofacial products
 report 704061700509-X issued by TÜV Süd for 1.500 V bifacial products

Responsible for making this declaration is the manufacturer and/or its authorized representative within the European Union (LONGi Solar Technologie GmbH).

i.A. Winfried Wahl
Head of Product Marketing



组件成品出货检验报告
Module Shipment Inspection Certificate

NO.LR04033202307140161

客户信息 Customer		数量（块） Quantity(pcs)	31
产品名称 Product	光伏组件 Photovoltaic modules	产品型号 Product Model	LR5-72HTH-M
标称功率(W) Nominal Power(W)	580	产品规格(mm) Product Size(mm)	2278*1134*35
检验项目 Inspection Items	检验标准（或技术要求） Inspection Criteria	检验结果 Result	
外观质量 Appearance Quality	LGiLE-Q-QED-009-A01 1102分布式 组件（半片电池）外观检验标准 1102 Distributed Appearance criteria for module(half cell)	OK	
组件尺寸 Component size		OK	
功率测试 Power	LGiLE-Q-QED-025 组件功率及电流分档规定 Grading Rules of Module Power and Current	OK	
绝缘耐压测试 Dielectric strength test	IEC61215:2016	OK	
EL 检测 EL Test	LGiLE-Q-QED-009-A02 1102分布式 组件（半片电池）EL检验标准 1102 Distributed EL criteria for module (half cell)	OK	
包 装 Package	LGiLE-T-PRD-112 带框组件包装装箱手册 Packing Mannual of Conventional Module	OK	
检验结论 Result	产品经检验合格，符合标准要求，准予出厂 ALL above products meet the quality requirements,Granted the factory		

产品质量合格证
Product Certificate of Quality

根据泰州隆基光伏科技有限公司的质量相关要求,隆基乐叶光伏组件产品特征经检验符合以下标准:
According to quality requirements of LONGi SolarTechnology (TaiZhou) Co., Ltd after inspection LONGi Solar module's
features conform below criteria:

序号 No.	产品规格(mm) Product Size(mm)	外观 Appearance	电性能 Electrical Performance	各项指标 Test Indexes
1	2278*1134*35	合格 Accept	合格 Accept	合格 Accept

特此证明以上泰州隆基光伏有限公司供应的产品满足质量要求。
We hereby certify that: all above products supplied by LONGi SolarTechnology (TaiZhou) Co., Ltd. meet the quality requirements.

泰州隆基光伏科技有限公司
LONGi SolarTechnology (TaiZhou) Co., Ltd.

检验员(Inspector): 钱金鑫

审核人(Auditor): 吴中建

批准人(Approver): 夏金量

日期 (Date): 2023-07-14





Product Service

CERTIFICATE

No. Z2 099333 0045 Rev. 23

Holder of Certificate: **LONGi Green Energy Technology Co., Ltd.**

No. 388, Middle Hangtian Road
Chang'an District
710100 Xi'an City, Shaanxi
PEOPLE'S REPUBLIC OF CHINA

Certification Mark:



Product:

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules
Mono-Crystalline Silicon Photovoltaic Module

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

Test report no.: 704061700516-23

Valid until: 2027-09-07

Date, 2022-09-08

(Zhulin Zhang)

CERTIFICATE

No. Z2 099333 0045 Rev. 23

Model(s):

LR6-72HV-xxxM, (xxx=335-360 in step of 5)
LR6-60HV-xxxM, (xxx=280-300 in step of 5)
LR6-72PH-xxxM, (xxx=340-380 in step of 5)
LR6-60PH-xxxM, (xxx=285-315 in step of 5)
LR6-72HPH-xxxM, (xxx=365-395 in step of 5)
LR6-72HIH-xxxM, (xxx=365-395 in step of 5)
LR6-60HPH-xxxM, (xxx=300-325 in step of 5)
LR6-60HIH-xxxM, (xxx=300-325 in step of 5)
LR6-72OPH-xxxM, (xxx=385-415 in step of 5)
LR6-60OPH-xxxM, (xxx=335-365 in step of 5)
LR6-72HPH-xxxMC, (xxx=375-390 in step of 5)
LR6-60HPH-xxxMC, (xxx=305-325 in step of 5)
LR4-72HPH-xxxM, (xxx=420-465 in step of 5)
LR4-72HIH-xxxM, (xxx=420-465 in step of 5)
LR4-60HPH-xxxM, (xxx=350-380 in step of 5)
LR4-60HIH-xxxM, (xxx=350-380 in step of 5)
LR4-72ZPH-xxxM, (xxx=420-435 in step of 5)
LR4-60ZPH-xxxM, (xxx=350-365 in step of 5)
LR6-60ZPH-xxxM, (xxx=330-355 in step of 5)
LR4-78ZPH-xxxM, (xxx=455-485 in step of 5)
LR5-72HPH-xxxM, (xxx=525-575 in step of 5)
LR5-66HPH-xxxM, (xxx=480-530 in step of 5)
LR4-66HPH-xxxM, (xxx=395-415 in step of 5)
LR4-66HIH-xxxM, (xxx=395-415 in step of 5)
LR5-72HIH-xxxM, (xxx=525-575 in step of 5)
LR5-66HIH-xxxM, (xxx=480-530 in step of 5)
LR5-78HPH-xxxM, (xxx=575-595 in step of 5)
LR5-78ZPH-xxxM, (xxx=565-585, in step of 5)
LR4-50HPH-xxxM, (xxx=305-320, in step of 5)
LR4-66HTB-xxxM, (xxx=410-430 in step of 5)
LR4-60HTB-xxxM, (xxx=370-390 in step of 5)
LR5-54HPH-xxxM, (xxx=395-435 in step of 5)
LR4-66HTH-xxxM, (xxx=420-440 in step of 5)
LR4-60HTH-xxxM, (xxx=380-400 in step of 5)
LR5-54HIH-xxxM, (xxx=395-435 in step of 5)
LR5-72HTH-xxxM, (xxx=555-600 in step of 5)
LR5-54HTH-xxxM, (xxx=420-450 in step of 5)
LR5-54HTB-xxxM, (xxx=410-440 in step of 5)
LR5-60HPH-xxxM, (xxx=435-480 in step of 5)
LR5-60HIH-xxxM, (xxx=435-480 in step of 5)
LR5A-54HAH-xxxM, (xxx=425-445 in step of 5)
LR5B-60HAH-xxxM, (xxx=425-445 in step of 5)
xxx stands for rated output power at STC

CERTIFICATE

No. Z2 099333 0045 Rev. 23

Parameters:

Fire Safety Class: Class C according to UL790.
Safety Class: Class II
Max. System Voltage: 1500V DC
Test Laboratory: Yangzhou Opto-Electrical
Products Testing Institute.
No.10 West Kaifa Road, Yangzhou
225009 Jiangsu, P.R. China.

connector.

Construction: Framed, with Junction box, cable and

Tested according to:

IEC 61215-1:2016
IEC 61215-1-1:2016
IEC 61215-2:2016
IEC 61730-1:2016
IEC 61730-2:2016
EN 61215-1:2016
EN 61215-1-1:2016
EN 61215-2:2017
EN IEC 61730-1:2018
EN IEC 61730-1:2018/AC:2018-06
EN IEC 61730-2:2018
EN IEC 61730-2:2018/AC:2018-06

EU Declaration of Conformity

(No. CE-10128435)

We **Huawei Technologies Co., Ltd.**
Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
Bantian, Longgang District, Shenzhen, 518129, P.R.C

declare that the product

Name/Trademark SOLAR INVERTER/HUAWEI
Model/Software SUN2000-50KTL-M3 / V800R023
Accessories NA

complies with the following directives:

- **2014/53/EU(Radio Equipment Directive)**
- **2011/65/EU & (EU) 2015/863 (RoHS Directive)**

For the evaluation of the compliance with these Directives, the following standards have been applied:

Radio Equipment Directive	
- Article 3.1 (a) Safety & Health	EN 62109-1:2010; EN 62109-2:2011 EN 50385:2017
- Article 3.1 (b) EMC	EN 55011:2016; EN 55011:2016+A1:2017 EN 55011:2016+A11:2020 EN 62920:2017 ETSI EN 301 489-1 V2.2.3:2019 ETSI EN 301 489-17 V3.2.4:2020 EN 61000-3-11:2000 EN IEC 61000-3-11:2019 EN 61000-3-12:2011 EN 61000-6-1:2007; EN IEC 61000-6-1:2019 EN 61000-6-2:2005 ; EN IEC 61000-6-2:2019 EN 61000-6-3:2007+A1:2011 EN 61000-6-4:2007/A1:2011 EN IEC 61000-6-4:2019
- Article 3.2 Radio	ETSI EN 300 328 V2.2.2
RoHS	EN IEC 63000:2018

This declaration of conformity is issued under the sole responsibility of the manufacturer.

CE Marking Date: 2022-08-29

Responsible for making this declaration is the:

☒ Manufacturer ☐ Authorised representative established within the EU

Signed for and on behalf of: Huawei Technologies Co., Ltd.

Print name/Title : LingHongDong / Regulation Compliance Manager

Shenzhen, China 2022-08-29 Ling Hong Dong
(Place) (Date) (Signature)

EU Declaration of Conformity

(No. CE-04397112-02)

We **Huawei Technologies Co., Ltd.**

**Administration Building, Headquarters of Huawei Technologies Co., Ltd.,
Bantian, Longgang District, Shenzhen, 518129, P.R.C**

declare that the product

Name/Trademark : SOLAR INVERTER/HUAWEI

Model : SUN2000-50KTL-M0

SUN2000-60KTL-M0

complies with the following directives:

- **2014/35/EU (Low Voltage Directive)**
- **2014/30/EU (EMC Directive)**
- **2011/65/EU (RoHS Directive)**

For the evaluation of the compliance with these Directives, the following standards/implementing regulations have been applied:

Safety	EN 62109-1:2010 EN 62109-2:2011
EMC	EN 61000-3-12:2011 EN 61000-3-11:2000 EN 61000-6-1:2007 EN 61000-6-2:2005 EN 61000-6-3:2007+A1:2011* EN 61000-6-4:2007+A1:2011*
RoHS	EN 50581: 2012

***The PLC communication mode or AC 480V power supply mode of Solar Inverter is not apply to this standard.

This declaration of conformity is issued under the sole responsibility of the manufacturer.

CE Marking Date: 2018-10-08

Responsible for making this declaration is the:

☒ Manufacturer ☐ Authorised representative established within the EU

Signed for and on behalf of: Huawei Technologies Co., Ltd.

Print name/Title : Ling HongDong / Regulation Compliance Manager

Shenzhen, China
(Place)

Oct.08, 2018
(Date)

Ling Hong Dong
(Signature)

SUN2000-100KTL-M2

Smart PV Controller



10
MPP Trackers



98.8% (@480V)
Max. Efficiency



String-level
Management



Smart I-V Curve Diagnosis
Supported



MBUS
Supported



Support AFCI &
Smart String Level
Disconnect



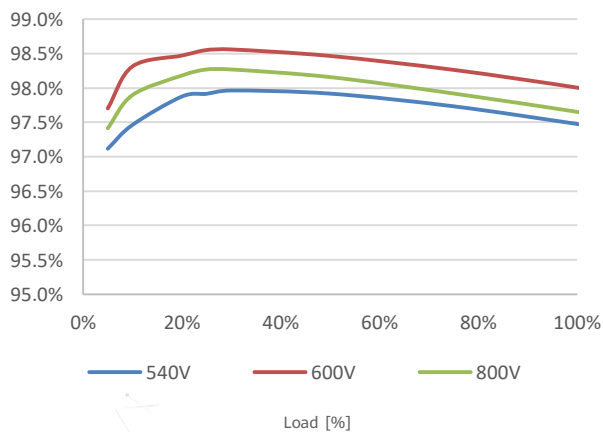
Surge Arresters for
DC & AC



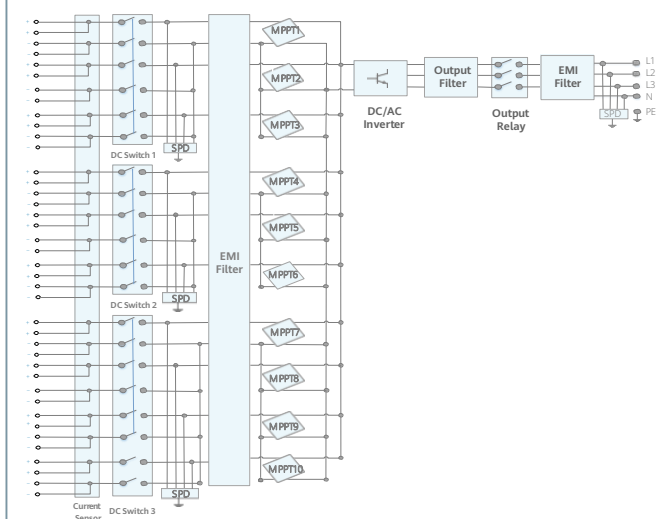
IP66
Protection

Efficiency Curve

SUN2000-100KTL-M2 @400 V



Circuit Diagram



Technical Specification	SUN2000-100KTL-M2
-------------------------	-------------------

Efficiency	
Max. efficiency	98.6% @ 400 V, 98.8% @ 480 V
European efficiency	98.4% @ 400 V, 98.6% @ 480 V

Input	
Max. Input Voltage ¹	1,100 V
Max. Current per MPPT	30 A
Max. Current per Input ³	20 A
Max. Short Circuit Current per MPPT	40 A
Start Voltage	200 V
MPPT Operating Voltage Range ²	200 V ~ 1,000 V
Nominal Input Voltage	600 V @ 400 Vac, 720 V @ 480 Vac
Number of MPP trackers	10
Max. input number per MPP tracker	2

Output	
Nominal AC Active Power	100,000 W
Max. AC Apparent Power	110,000 VA
Max. AC Active Power (cosφ=1)	110,000 W
Nominal Output Voltage	380 V/ 400 V/ 480 V, 3W+(N)+PE
Rated AC Grid Frequency	50 Hz / 60 Hz
Nominal Output Current	144.4 A @ 400 V, 120.3 A @ 480 V
Max. Output Current	160.4 A @ 400 V, 133.7 A @ 480 V
Adjustable Power Factor Range	0.8 leading... 0.8 lagging
Max. Total Harmonic Distortion	< 3%

Protection	
Input-side Disconnection Device	Yes
Anti-islanding Protection	Yes
AC Overcurrent Protection	Yes
DC Reverse-polarity Protection	Yes
PV-array String Fault Monitoring	Yes
DC Surge Arrester	Type II
AC Surge Arrester	Type II
DC Insulation Resistance Detection	Yes
Residual Current Monitoring Unit	Yes
Arc Fault Protection	Yes
Smart String Level Disconnecter	Yes

Communication	
Display	LED indicators; WLAN adaptor + FusionSolar APP
RS485	Yes
USB	Yes
Smart Dongle-4G	Smart Dongle – 4G / WLAN (Optional)
Monitoring BUS (MBUS)	Yes (isolation transformer required)

General Data	
Dimensions (W x H x D)	1,035 x 700 x 365 mm
Weight (with mounting plate)	93 kg
Operating Temperature Range	-25°C ~ 60°C
Cooling Method	Smart Air Cooling
Max. Operating Altitude	4,000 m (13,123 ft.)
Relative Humidity	0 ~ 100%
DC Connector	Amphenol Helios H4
AC Connector	Waterproof Connector + OT/DT Terminal
Protection Degree	IP66
Topology	Transformerless
Nighttime Power Consumption	< 3.5 W

Standard Compliance (more available upon request)	
Certificate	EN 62109-1/-2, IEC 62109-1/-2, EN 50530, IEC 62116, IEC 61727, IEC 60068, IEC 61683
Grid Connection Standards	VDE-AR-N4105, EN 50549-1, EN 50549-2, RD 661, RD 1699, C10/11

^{*1} The maximum input voltage is the upper limit of the DC voltage. Any higher input DC voltage would probably damage inverter.

^{*2} Any DC input voltage beyond the operating voltage range may result in inverter improper operating.

^{*3} Single-string access.