

# SOFAR 15K~24KTLC-G3

15 / 17 / 20 / 22 / 24 kW

THREE-PHASE DUAL MPPT



## Product advantages

- Maximum efficiency 98.6%
- Low start-up voltage, wide MPPT voltage
- Maximum DC input voltage 1100 V
- Smart string level monitoring
- Type II SPD for both DC and AC side
- Remote firmware upgrade
- 110% long-time overload ability



Datasheet	SOFAR 15KTLC-G3	SOFAR 17KTLC-G3	SOFAR 20KTLC-G3	SOFAR 22KTLC-G3	SOFAR 24KTLC-G3
<b>Input (DC)</b>					
Max. input voltage	1100V				
Rated input voltage	650V				
Start-up voltage	160V				
MPPT operating voltage range	140V-1000V				
Number of MPP trackers	2				
Number of DC inputs	2/2				
Max. input MPPT current	26A/26A	26A/26A	26A/26A	26A/26A	26A/26A
Max. input short circuit current	36A/36A	36A/36A	36A/36A	36A/36A	36A/36A
<b>Output (AC)</b>					
Rated output power	15000W	17000W	20000W	22000W	24000W
Max. apparent power	16500VA	18700VA	22000VA	24200VA	26400VA
Max. output current	23.9A	27.1A	31.9A	35.1A	38.3A
Rated output voltage	3/N/PE, 230V/400Vac				
Output voltage range	310Vac-480Vac				
Rated output frequency	50/60Hz				
Output frequency range	45Hz-55Hz/55Hz-65Hz				
Active power adjustable range	0-100%				
THDI	<3%				
Power factor	1 (adjustable +/-0.8)				
<b>Efficiency</b>					
Max. efficiency	98.6%	98.6%	98.6%	98.6%	98.6%
European efficiency	98.2%	98.2%	98.2%	98.2%	98.2%
<b>Protection</b>					
DC reverse polarity protection	Yes				
Anti-islanding protection	Yes				
Leakage current protection	Yes				
Ground fault monitoring	Yes				
PV-array string fault monitoring	Yes				
DC switch	Yes				
SPD	PV: type II, AC: type II				
<b>General Data</b>					
Ambient temperature range	-30 C--+60 C				
Self-consumption at night	<1W				
Topology	Transformerless				
Degree of protection	IP66				
Allowable relative humidity range	0-100%				
Max. operating altitude	4000m				
Cooling	Smart air cooling				
Dimension (W*H*D)	520*430*189mm				
Weight	20kg	22kg	22kg	23kg	23kg
Display	LCD & Bluetooth +APP				
Communication	RS485/WIFI				
Standard	IEC/EN 61000-6-1/3, IEC/EN 61000-3-11/12, IEC 62116, IEC 61727, IEC 61683, IEC 60068-1/2/14/30, IEC/EN 62109-1/2 G99, VDE-AR-N 4105, VDE V 0126-1-1, CEI0-21, EN 50549-1, NRS 097-2-1				

\*All specifications are subject to change without notice.

Version: 1.2, Updated 18.11.2022

## Applicable products

This Factory's Warranty only applies to the following products, which are installed in European countries.

PRODUCT	STANDARD WARRANTY PERIOD (MONTHS)	SERVICE MODES
<b>INVERTERS</b>		
GRID-TIED(1.1KW~255KW)	120	Remote Technical Support Service or/ and Onsite Service
ENERGY STORAGE(ME, HYD, ESI SERIES)	60	
<b>ACCESSORIES</b>		
SOFARSOLAR ANTI-REVERSE POWER CONTROL(ARPC)	24	Remote Technical Support Service or/ and Onsite Service
SOFARSOLAR INTELLIGENT ANTI-REFLUX BOX(SAR-100)	24	
CT CLAMP	24	
SMART METER	24	
WIFI DONGLE	24	

\*This factory warranty is a promise from SOFARSOLAR to its end users on the applicable products listed above. Subject to the trading countries/states, end users may receive an additional warranty promise (should be at least equivalent to the Factory's warranty) which is provided by SOFARSOLAR's local distributor; should any claims arise in this respect, please direct the claims to the local distributor.

Please refer to the latest version of the SOFARSOLAR limited warranty by visiting our global website via <https://sofarsolar.com/>

## Warranty Period

The standard warranty period for applicable SOFARSOLAR inverters is 60 months (5 years) for Energy storage Inverters and 120 months (10 years) for Grid-tied Inverters from the warranty start date.

The Standard Warranty Period shall commence from the earlier of the following:

- (1) the date of when the first installation of the warranted product is completed, or the date of purchase on a valid purchasing invoice that end user provide.
- (2) 6 months after the date of production from Shenzhen SOFARSOLAR Co.Ltd (defined in the Serial number of the product) for circumstances where end user fails to provide a valid purchasing invoice.

## Warranty Conditions

In the case of a faulty inverter during the agreed SOFARSOLAR warranty period, please report the defective inverter with a brief error description to our service hotline for registering and send your warranty card to our service department by fax/email to process the warranty claim. You may also contact your dealer (SOFARSOLAR authorized dealer or distributor) or installer if your unit is defective or faulty.

To make a claim under the warranty periods of SOFARSOLAR, you need to provide us the following information and documentation of the faulty inverter:

- 1) Product Model and serial number
- 2) A copy of the valid purchasing invoice
- 3) Fault descriptions and error IDs (where applicable)
- 4) End user and/or claimant details
- 5) Detailed information about the entire system (module, PV system diagram, installation date, etc.)
- 6) Documentation of previous claims/exchanges (if applicable)

If an inverter is faulty while it is under SOFARSOLAR warranty period, it will be:

- Repaired by SOFARSOLAR, or
- Repaired on-site, or
- Exchanged with a refurbished inverter that includes all firmware updates

If the inverter needs to be exchanged, the remainder of the warranty period will be transferred to the replacement unit, i.e. the warranty period of the original device will continue. In this event, you will not receive a new warranty card, and this replacement will be registered by SOFARSOLAR. If the remaining warranty period is less than 6 months, you will automatically receive a 6-month warranty period for the replacement unit.

The warranty includes the cost of work and material necessary to regain a faultless functioning inverter. All other costs, particularly transports, travel and accommodation cost of SOFARSOLAR personnel as well as costs of your own staff are not included in the warranty. Furthermore, claims for compensation for direct or indirect damages arising from the defective inverter are not covered by the warranty.

Faulty inverters and components should be returned to SOFARSOLAR, they must be packed in their original or equivalent packaging for transportation.

SOFARSOLAR keeps the right to arrange the warranty service for end users and to use third parties for performing warranty services.

All warranty services are free of charge only if the action is agreed with SOFARSOLAR in advance.

### Scope of the Manufacturer Warranty

To provide excellent Service to SOFARSOLAR's end users, all SOFARSOLAR authorized Dealers or Distributors are requested to respond to your warranty claim. SOFARSOLAR will replace any products or parts of the product during the Warranty Period proved to be defective in design or manufacture. Any defect caused by the following situations will not be covered by the manufacturer's warranty (the Dealers or Distributors are responsible and authorized by SOFARSOLAR for the following investigation):

- 1) "Warranty Card" not being sent back to Distributor/Dealer or SOFARSOLAR
- 2) The Product has been modified, its design has been changed or parts have

been replaced by parts not approved by SOFARSOLAR

- 3) Changes have been made, or repairs been attempted by technician, without authorization from SOFARSOLAR, or serial number or seals have been removed
- 4) The product has been installed or commissioned incorrectly
- 5) You or another user have failed to comply with the safety regulations (VDE standards or equivalent)
- 6) The product has been improperly stored and damaged while being stored by the dealer or the end user
- 7) The defect is damage during transportation (including painting scratch caused by movement inside packaging during shipping). A claim for such transport damage should be made directly to the shipping company/insurance company as soon as the container/packaging is unloaded and such damage is identified
- 8) You or another user have failed to follow any/all of the user manual, the installation guide, and the maintenance regulations
- 9) The device has been used improperly or misused
- 10) Insufficient ventilation of the device
- 11) The maintenance procedures relating to the product have not been followed to an acceptable standard
- 12) The defect has been caused by force majeure (violent or stormy weather, lightning, overvoltage, fire etc.)
- 13) The damage is only cosmetic and has no impact on the functioning of the device

This warranty is without prejudice to your rights under the statutory law, including but not limited to warranty rights in relation to the seller, i.e. if applicable rectification, reduction of the price, rescission of the sale and damages.

All demands from or in connection with this warranty are subject to Chinese law, Shenzhen is the exclusive place of jurisdiction and all disputes arising from or in connection with this warranty should be submitted for arbitration to the Shenzhen court of international arbitration. This warranty is provided in addition to other rights and remedies held by a consumer at law.

### **Extension of the Warranty Period**

For SOFARSOLAR inverters you may apply for a warranty extension during 60 months from the date of production from SOFARSOLAR by providing the serial number and copy of the warranty card of the unit. SOFARSOLAR may reject any application received which does not meet the date requirement. Extended warranty period can be purchased to 10, 15, or 20 years.

Once the purchase of the warranty extension has been processed, SOFARSOLAR will send the warranty extension certificate to the

customer confirming the extended warranty period.

Latest information about the warranty terms and conditions and local service hotline can be obtained from our website: [www.sofarsolar.com](http://www.sofarsolar.com)

### **Contact us**

You can directly contact our professional after-sales team:

Sofarsolar GmbH, Krämerstrasse 20,72764 Reutlingen

Tel: +49 7121 31 767 30

Shenzhen Sofarsolar Co., Ltd.

TEL:+86-0755 3689 9945

Email: [service@sofarsolar.com](mailto:service@sofarsolar.com)

Web: [www.sofarsolar.eu](http://www.sofarsolar.eu)





# Authorized Official Service Partner CERTIFICATE

We, **Shenzhen SOFARSOLAR Co., Ltd.**

who are established and reputed Manufacturer of Inverter having factory at 1st to 6th floor, Building E, No.1, Jinqi Road, Bihu Industrial Zone, Wulian Village, Fenggang Town, Dongguan City, Guangdong Province, China

do hereby authorize

**S.C. "ELLVICA" S.R.L.**

as **Authorized Official Service Partner Certificate**  
for **sofar inverters**.

Period of Validity: **3 Years**

Yours faithfully,

**SHENZHEN SOFARSOLAR CO., LTD.**

**DATE** 12 / 1 / 2022



For and on behalf of  
Shenzhen SOFARSOLAR Co., Ltd.

**SHENZHEN SOFARSOLAR CO., LTD.**

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BaoAn District, Shenzhen, GuangDong.P.R. China

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The right of final interpretation belongs to SOFARSOLAR.