

Residential Smart PV Warranty Policy (Global)

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About This Document

Applicability

This document describes the warranty conditions for Huawei residential Smart PV solutions.

Terminology

Site or local in this document refers to the country or region to which residential solutions are delivered, that is, where the residential solutions are located or used.

Precedence

In case there is any local service policy, or any contracts between Huawei and the Customer, which may be inconsistent with the service descriptions contained herein, the precedence among these documents, from the highest to the lowest, are as below:

1. Contract(s) between the parties;
2. Huawei local service policies;
3. This Residential SmartPV Warranty Conditions

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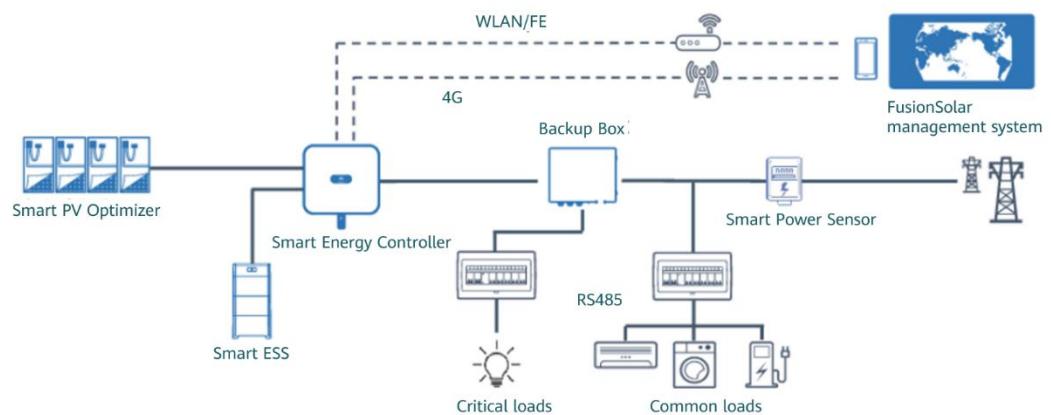
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1 Service Scope

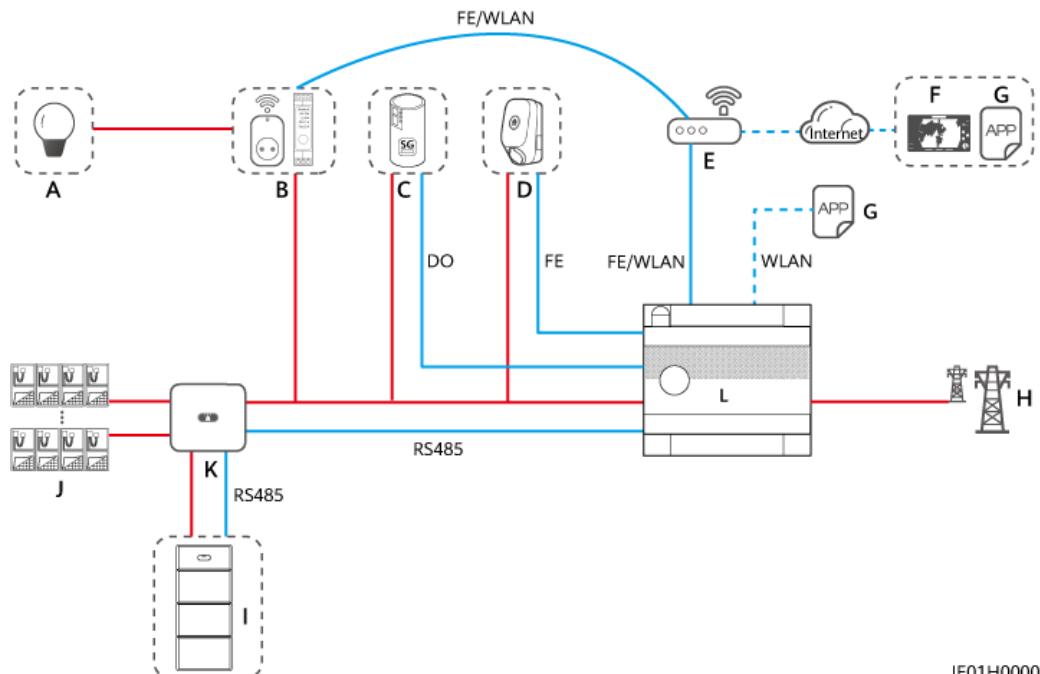
1.1 Residential Solution Networking

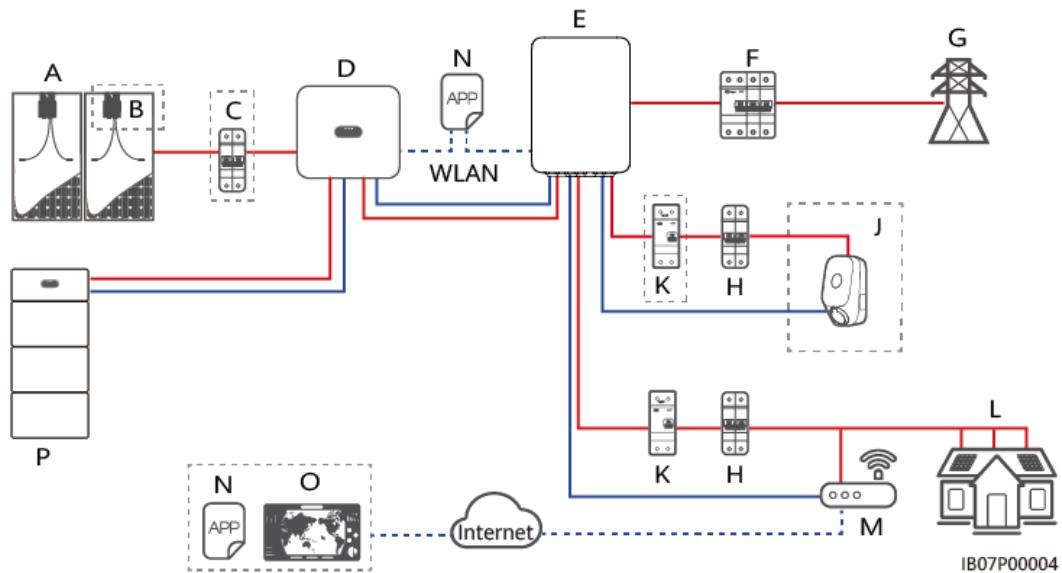
1.1.1 Networking Scenarios

Residential solution scenario (Dongle networking)



Residential solution scenario (SmartAssistant networking)



Residential solution scenario (SmartGuard networking)


Huawei's residential solution consists of the following parts:

- Generator: Smart PV Optimizer and Smart Energy Controller
- Smart energy storage system (ESS)
- Monitoring system: residential PV management system

Table 1-1 Residential solution

Smart Power Generation	Smart Energy Storage	Smart Power Consumption	System Safety
The Smart PV Optimizer implements module-level optimization and adapts to complex rooftop conditions, maximizing capacity and increasing energy yields by up to 30%.	Adopts modular energy storage design, flexible configuration, and built-in energy optimizer, supports mixed use of old and new batteries, and achieves higher available capacity.	Visualizes energy yields and consumption, optimizes household electricity use, and provides backup power during power outages.	Provides protection against rooftop PV voltage and arcs and ensures home safety through multi-level protection.

1.2 Main Products in Huawei's Residential Solution

Table 1-2 Main products in Huawei's residential solution

Main Product (Including but Not Limited to)
Smart Energy Controller
Smart String ESS
iSitePower-M



Main Product (Including but Not Limited to)
Smart PV Optimizer
Backup Box/SmartGuard
Smart Power Sensor
SmartAssistant
Smart Dongle
Smart Charger
* Note: The main products of Huawei's residential solution will be updated from time to time. Please refer to the latest version.

2 Service Policy

2.1 Definitions

- a) **Standard warranty:** A warranty that is provided with the products by default and not sold independently.
- i) **Basic warranty services:** The services to be provided by Huawei by default during the standard warranty period.
- ii) **Advanced warranty services:** The services to be provided by Huawei during the standard warranty period for the residential LUNA-S1 ESS. If the product is not connected to Huawei FusionSolar after power-on, or has been continuously disconnected for over 6 months, the advanced warranty shall be void.

2.2 Standard Warranty Services

2.2.1 Standard Warranty Period Start Date

Start Date	Global
Direct sales: 90 days after the date of shipment by Huawei	✓
Distribution: 180 days after the date of shipment by Huawei	✓
Shortest warranty period after spare parts replacement	90/other periods otherwise specified in the contract

NOTE

- The shortest warranty period of spare parts is calculated from the date when spare parts are shipped.
- The warranty period Huawei provides after spare parts replacement is: 90 days from the date of shipment of the spare part, or the remaining warranty period of the original replaced products (whichever longer), or other periods agreed upon in the contract.

2.2.2 Standard Warranty Periods

Table 2-1 Standard warranty periods

Product Type	Product Series	Standard Warranty Period / Lifecycle Electricity
Smart Energy Controller (single-phase inverter)	SUN2000-L1	5 years: China, India 10 years: Others
	SUN2000-LB0	10 years
	SUN2000-LC0	10 years



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Smart Energy Controller (three-phase inverter)	SUN2000-M0	5 years: China, India, LATAM 10 years: Others
	SUN2000-M1	5 years: India, LATAM 10 years: Others
	SUN2000-MAP0	10 years
	SUN2000-M2	5 years: India, LATAM (excluding Brazil) 10 years: Others
	SUN2000-M5	5 years: India, LATAM (excluding Brazil) 10 years: Others
	SUN2000-MB0	5 years: LATAM (excluding Brazil) 10 years: Others
Smart PV Optimizer	SUN2000	10 years: China 25 years: Others
	MERC	10 years
Whole-home Backup Box	SmartGuard	10 years
On/Off Grid Backup Box	Backup Box	2 years: Others 3 years: Spain, Portugal
Smart Energy Management Assistant	SmartAssistant	2 years: Others 3 years: Spain, Portugal
Smart Power Sensor	Power Meter	2 years: Others 3 years: Spain, Portugal
Smart Dongle	SDongle (delivered separately)	1 year: China, Japan 2 years: Others 3 years: Spain, Portugal 5 years: China (Dongle built-in SIM card)
	SDongle (delivered with the inverter)	5 years: LATAM 10 years: Europe, India, Africa, APAC, MECA
Residential CT in Japan	/	1 year
Combiner Box	/	1 year
AC Charger	SCharger-S0	3 years
Smart String ESS LUNA2000-S0	Power Control Module	5 years: APAC, India, ME&A (excluding Morocco and Southern Africa), Other countries in LATAM 7 years: Morocco and Southern Africa (excluding South Africa), LATAM (Brazil, Peru, Chile, Argentina, Paraguay, and Uruguay), Central Asia (Uzbekistan, Turkmenistan, and Tajikistan) 10 years: China, Australia, Europe, Japan, South Africa, Central Asia (Kazakhstan, Mongolia, Georgia, Azerbaijan, Kyrgyzstan, and Armenia)
	Battery Expansion Module (5 kWh Pack)	(whichever comes earlier) 5 years or 13.17 MWh@60% EOL: APAC, India, ME&A (excluding Morocco and Southern Africa), Other countries in LATAM 7 years or 13.17 MWh@60% EOL: Morocco and Southern Africa (excluding South Africa), LATAM (Brazil, Peru, Chile, Argentina, Paraguay, and Uruguay), Central Asia (Uzbekistan, Turkmenistan, and Tajikistan) 10 years or 13.17 MWh@80% EOL: Germany, Switzerland 10 years or 16.45 MWh@60% EOL: China, Australia, Europe (excluding Germany and Switzerland), Japan, South Africa, Central Asia (Kazakhstan, Mongolia, Georgia, Azerbaijan, Kyrgyzstan, and Armenia)

Smart String ESS LUNA2000-S1	5 kWh System	Energy Storage Control Unit	15 years (5 years basic warranty + 10 years advanced warranty): Europe
		Battery Expansion Module (5 kWh Pack)	(whichever comes earlier) 15 years (5 years basic warranty + 10 years advanced warranty) or 26.44 MWh@80% EOL: Europe
	6.9 kWh System	Energy Storage Control Unit	10 years (5 years basic warranty + 5 years advanced warranty): China, APAC, India, MECA, LATAM, Africa 15 years (5 years basic warranty + 10 years advanced warranty): Europe, Australia, Japan
		Battery Expansion Module (6.9 kWh Pack)	(whichever comes earlier) 10 years (5 years basic warranty + 5 years advanced warranty) or 19.23 MWh@60% EOL: China, APAC, India, MECA, LATAM, Africa 15 years (5 years basic warranty + 10 years advanced warranty) or 28.84 MWh@60% EOL: Europe, Australia, Japan
iSitePower-M	Power Control Module		5 years
	Battery Expansion Module (5 kWh Pack)		5 years or 13.17 MWh@60% EOL, whichever comes earlier

NOTE

- The Smart PV Optimizer warranty is available only when the physical layout is correct.
- The warranty of a battery pack expires when the specified warranty period ends or the electricity capacity reaches the specified EOL capacity, whichever is earlier. The warranty of a power module or energy storage control unit expires when the specified warranty period ends, irrespective of the electricity capacity of the battery. The warranty for battery packs and power modules or energy storage control units are provided independently.
- Capacity test conditions: Charge the battery pack to 100% SOC at the ambient temperature of $25^{\circ}\text{C}\pm3^{\circ}\text{C}$ and wait for 10 minutes. Then, discharge it at the 0.2C current to the end-of-discharge (EOD) voltage, and record the discharged electricity.
- To remotely upgrade the firmware to ensure the service life of battery cells, the ESS must be connected to the Huawei FusionSolar SmartPVMS. For ESS products that are not connected, the warranty does not cover the battery cell damage caused by failure to upgrade the products in time.
- To remotely upgrade the firmware to ensure the service life of battery cells, the LUNA2000-S1 must be connected to the Huawei FusionSolar SmartPVMS. Such products are entitled to both the basic warranty and advanced warranty, but for products that have been disconnected from Huawei FusionSolar SmartPVMS for more than six months or have not been connected after power on, the advanced warranty is voided.
- The Customer should install the ESS within one month after purchase. If the ESS is faulty, the Customer must report the fault within one month. The warranty does not cover damage to the battery cell caused by failure to regularly recharge the battery.
- The operating temperature and service life of the ESS depend on the operating temperature. The ESS should be installed at room temperature. The optimal operating temperature for the ESS is 15°C to 30°C .
- The preceding table lists the basic warranty period and lifecycle electricity of residential ESS products. The actual warranty period and lifecycle electricity are subject to the contract.
- The warranty conditions and limitations for iSitePower-M are the same as those for LUNA2000 series.

2.2.3 Standard Service Contents and SLA

Table 2-2 Basic warranty service

Huawei Digital Power Standard Warranty Service		
Service Category	Service	Description
Remote technical support	Helpdesk	24x7
	Remote troubleshooting	China/Japan/South Korea: 12x7 Other countries: 9x5
	Online technical support	24x7
Software support	Software update	24x7
Hardware support	Spare parts replacement	Subject to SLA specified on the contract, or local service policy

 **NOTE**

- The above service SLA is subject to the contract. Please consult your local service team for further details;
- 7x24: 00:00–24:00, Monday to Sunday;
- 12x7: 8:00–20:00, Monday to Sunday (including holidays);
- 9x5: 9:00–18:00, business days (excluding public holidays);

2.2.4 Remote support

During the warranty period, Huawei provides hotline, remote troubleshooting, online technical support, and multi-channel support.

- Hotline is a telephonic service interface and platform for receiving and tracking service requests of the Customer.
- Remote troubleshooting and online technical support allow the Customer to find technical information, solutions to fix problems and patch downloading.
- Multi-channel support allows the Customer to acquire technical support information of Huawei products by other supported media platform.

2.2.5 Software support

- During the warranty period, Huawei ensures that the product works properly. Nevertheless, Huawei does not guarantee that the software will be error-free or run uninterruptedly, nor does it guarantee that all program errors will be rectified.
- Huawei provides software releases. During the warranty period, the Customer can obtain new software releases for free from the following website. It is important to note that the software releases provided by Huawei are intended to fix functional defects and do not offer new functions and/or features.

<https://support.huawei.com/enterprise/en/category/fusion-solar-pid-1600073963553?submodel=software>

- c) After the software validity period, Huawei does not provide troubleshooting and fixing services to such software. Before the expiry of the validity period, the Customer needs to update to the newer software. If the Customer does not update to the newer software, it is deemed that the Customer waives the right to software updates. Huawei will not be responsible for any issues related to the old software arising in such cases.

2.2.6 Hardware Support

- a) Huawei provides functional replacement of all purchased hardware during the warranty period.
 - i) Huawei will replace hardware for free if the hardware has defects in material, manufacturing, or processing techniques.
 - ii) Huawei will replace hardware for free if the hardware delivered by Huawei are not compliant with the agreed specifications.
- b) After approving the Customer's spare parts service application, Huawei will send the replacement parts within the mutually agreed time frame. The Customer only needs to return the faulty parts to the place designated by Huawei within 15 days after receiving the replacement parts from Huawei. If the faulty parts are not returned within the specified period, it is deemed that the Customer purchases the parts at the list price. If any damage or loss occurs during the return via a courier, the Customer shall be liable for the consequences.
- c) If Huawei has provided spare parts in previous purchase orders, these parts should be used for replacement first, and they cannot be sold to third parties or used for other purposes by the Customer.
- d) The spare parts provided by Huawei will have the same or better performance as the faulty parts, but Huawei does not guarantee that all spare parts are new or exactly the same as the faulty devices in terms of appearance.
- e) To report product issues and request for service, the Customer shall contact the Huawei hotline and provide the following information:
 - i) A brief description of the fault, including but not limited to input and output parameters, alarm ID, cause ID, and run logs;
 - ii) Product serial number;
 - iii) Purchase receipt;
- f) In principle, a faulty product should be replaced as a whole, except for the following situations where the component-level replace is available:
 - i) The Smart Dongle delivered with the inverter can be replaced separately.
 - ii) The power module and the battery pack for the residential ESS system can be replaced separately, each with a separate warranty.
 - iii) The fuse in the power module, and the fan module of an air-cooled inverter can be replaced separately.

3 Warranty Disclaimer

1. Huawei may be unable to provide warranty services in the following situations:
 - a. Force majeure events, such as natural disasters, fires, flood, earthquake, and lightning strikes, etc.
 - b. Deterioration of service conditions caused by social problems, such as: turmoil, war, strikes, government regulations, etc.
 - c. Shortage or outage of power/resource supply (such as water, electricity, and fuel).
 - d. Interruption of carrier's communication network.
2. Following situations are not covered by Huawei's warranty services:
 - a. Damage to Huawei-manufactured products caused by force majeure, such as natural disasters, fires, and wars;
 - b. Damage to Huawei-manufactured products caused by natural wear and tear;
 - c. Damage caused by the Customer's or a third-party's negligence, improper operation, or intentional sabotage, or violation of the transportation, storage, installation, and operation regulations specified in the product user manual;
 - d. Adjustment, alteration, and removal of identification signs (bar code and serial number);
 - e. The operating environment (such as power distribution, temperature and humidity, load bearing, heat dissipation, and air tightness) or other external factors (such as electromagnetic interference and ground subsidence) of the products cannot meet the requirements or common industry standards for running the products/systems, so that the products/systems are damaged;
 - f. Damage caused by the Customer's infrastructure problems;
 - g. Damage caused by services performed by personnel not authorized by Huawei;
 - h. Damage caused by operating or connecting Huawei products with incompatible third-party products;
 - i. The following consumable materials and mechanical parts are not covered by the warranty.

Type	Description
Consumable	Including but not limited to fuses and cables.
Cabinet and accessory	Including but not limited to cabinet mechanical parts, documents, installation accessories (such as mounting ears, and slide rail), and tools.

3. All the preceding warranty services are applicable only to Huawei-manufactured products, not including any third-party products or parts.

4. Huawei does not guarantee that the products can be running error-free or uninterrupted, or that all such errors can be fixed.
5. Huawei shall be exempted from liability for not completing the services within the SLA commitment due to non-Huawei reasons.
6. The parties hereby agree that Huawei's compensation against the Customer's loss under this warranty agreement shall only cover the direct and reasonable losses incurred, justifiable with evidences, to the Customer due to Huawei's fault or product issue. Huawei shall not be liable for any indirect damages including but not limited to loss of income or profit, damage to reputation, or loss of data. The maximum liability of Huawei under this warranty agreement shall not exceed the amount paid by the Customer to Huawei for the related product.
7. Huawei does not guarantee the Customer's data stored in its products or related to the products in other forms. The Customer is responsible for backing up the data to prevent loss. If Customer accepts the warranty service provided by Huawei, it means that Customer allows Huawei to access, collect, and handle information related to faults, troubleshooting, and commissioning during the service provision. Huawei will access and process related information as required by Customer with Customer's consent. The information will be used only for providing warranty services. As Customer is the controller of the information, Huawei cannot confirm whether the information contains Customer's confidential information or personal data. Customer shall ensure that Customer will obtain or retain all necessary consents, licenses, and authorizations ("Consent") for Huawei to provide the services in accordance with applicable legal requirements. Customer shall ensure that Huawei does not violate applicable laws, Customers' privacy policies, or agreements between Customers and users when providing related services. Huawei will take reasonable measures to ensure the security of such Customer information. However, Huawei shall not be liable for any direct or indirect liability caused by the acquisition and processing of such information during the service provision process. If Customer returns the hardware to Huawei, it is deemed that Customer has backed up and permanently deleted any confidential, private, or personal information stored in the hardware and authorized Huawei to transfer the hardware to Huawei's repair centers (which may be located in other countries) for repair. Customer shall be solely responsible for deleting the above information before delivering the hardware to Huawei, and shall further indemnify and defend Huawei and hold Huawei harmless from any government agency or third party's failure to comply with applicable laws and regulations in transferring and disposing of the above information. any and all claims, liabilities, obligations, costs, expenses, penalties, fines, forfeitures and adverse consequences of the award.