



**SolarGrid Energy Solutions**

**The DC component of the inverter exceeds the standard**



## Overview

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What if the DC component in the grid current exceeds the threshold?

The DC component in the grid current exceeds the upper threshold. The inverter monitors its external working conditions in real time. The inverter automatically recovers after the fault is rectified. If the alarm occurs frequently, contact your dealer or Huawei technical support. The inverter monitors its external working conditions in real time.

What if a DC inverter voltage is too high?

In this case, it is recommended to exchange the inverter. DC Bus Voltage Too High (Code 019/020) 1. Fault code 019: The instantaneous value of bus voltage exceeds 1080 V or the instantaneous value of half bus voltage exceeds 580V, exceeding the protection value for more than 0.3 ms.

What if a dc-grid inverter fails?

1. If this fault occurs in batches in an array, it is caused by the DC-grid. 2. If a single inverter fails, download the DSP auxiliary record of the inverter to analyse the DC component sampling value. If the value is significantly abnormal, the sampling circuit on the control board may be faulty. It is recommended to replace the control board. 3.

What is DCI high inverter failure?

2. Inverter failure of over direct current injection (DCI High) The DC component detection circuit inside the inverter samples the AC output, filters out the AC part, and then compares the DC part with the set value (rated current  $\times$  0.5%). If the set value is exceeded, the inverter reports inverter failure of DC overweight inverter failure.

What if a PV string open-circuit voltage exceeds the maximum input voltage?

Open-circuit voltage exceeds the maximum input voltage. What to do: Contact your solar installer. Check the number of PV modules connected in series in

the PV string, and ensure that the PV string open-circuit voltage is no greater than the maximum operating voltage.

Why is the AC side voltage of the inverter too high?

Reasons why the AC side voltage of the inverter is too high: ① The cable between the inverter and the grid connection point is too thin, too long, entangled, or the cable material is unqualified, causing the voltage on the AC side of the inverter to rise ( $\Delta U$  increases).

## The DC component of the inverter exceeds the standard

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### What's Inside Your Inverter? Main Components ...

Mar 20, 2025 · Learn about the core components of an inverter to help you choose the right inverter for your system's efficiency and longevity.

## Infinisolar 10KW / MPI 10K

Apr 12, 2023 · After about 2 weeks in service the inverter stops working with ERROR 14 "inverter dc component exceeds the allowable range". It remains

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### The Most Comprehensive Guide to Grid-Tied ...

It is well-known that inverters are a crucial component of photovoltaic systems. Understanding inverter parameters is essential for better system design and ...

## What Happens If You Connect Too Many Solar ...

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Dec 13, 2024 · Each inverter has a rated capacity, such as 5kW or 10kW, indicating the maximum amount of DC power it can handle and convert ...



## 2040 DC Component Overhigh

Apr 25, 2025 · 2040 DC Component Overhigh Alarm Attribute Possible Cause Suggestion The device detects its external working conditions in real time. After the fault is rectified, the ...

## OV\_DC: DC Over Voltage

4 days ago · High DC voltage can damage the inverter, potentially leading to costly repairs or replacements. It presents a serious safety hazard due to the high electrical potential. ...



## 10 common inverter failure and the solutions - ...

Nov 15, 2023 · Inverter failure of over direct current injection (DCI High) The DC component detection circuit inside the inverter samples the AC output,

filters ...



## Inverter common fault contents and solutions

May 11, 2024 · Solution: Check the parameters of the inverter, determine the input range of DC voltage, and then measure whether the open circuit voltage of the string is within the allowable ...



## Evaluation of Photovoltaic Inverters According to Output ...

Jan 23, 2025 · The limits of direct current (DC) injection and output current distortion of grid-connected photovoltaic (PV) inverters are specified in the IEEE 1547-2018 standard. The ...

## ABB Solar Inverter Error Code , Pacific Sun ...

Sep 22, 2023 · The inverter is a vital component of a solar system. After the PV modules convert sunlight to solar

electricity, the solar inverter converts the ...



## Overload A Solar Inverter: Causes And ...

Overloading occurs when the DC power from the solar panels exceeds the inverter's maximum input rating, causing the inverter to either reduce input ...

## Leakage Current Control in Solar Inverter

Oct 6, 2019 · Standard and detection of leakage current According to the 7.10.2 regulation of NB32004-2013 standard, in any case where the solar inverter is ...



## Sungrow Inverter Error Codes & Troubleshooting Guide

The inverter will run through its startup checks, and within a few minutes, it should begin operating normally. Most models will display "Normal",

"Generating", or similar status once active.



## Fault codes and troubleshooting steps 011-020 ...

DC Injection Exceeded (Code 011) The DC component of any phase exceeds the set DC component protection value. 1. If this fault occurs in batches in an array, it is caused by the DC ...



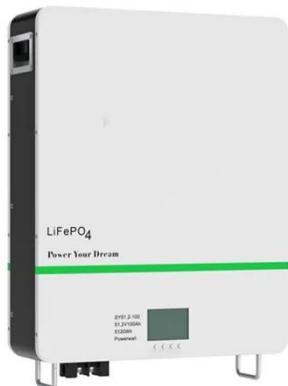
## Explaining Solar Inverter Datasheets: A ...

Apr 10, 2024 · As the world shifts towards clean energy sources, solar power is becoming increasingly popular. A solar inverter ...

## How to Use DC to AC Inverter: Examples, Pinouts, and Specs

Learn how to use the DC to AC Inverter with detailed documentation, including pinouts, usage guides, and example projects. Perfect for students, hobbyists,

and developers integrating the ...



## **HUAWEI SUN2000 Inverter Fault Codes**

HUAWEI SUN2000 Inverter Fault Codes: Huawei SUN2000 series, often have built-in diagnostic systems that display error codes to help identify and ...

## **Causes of DC overcurrent in photovoltaic inverters**

Converting DC to AC Power. Photovoltaic (PV) inverters play a crucial role in solar energy systems by converting the direct current (DC) produced by solar panels into alternating current ...



## **Solar Inverter Components -- Key Parts and ...**

6 days ago · A solar inverter is an electronic device that changes DC electricity from solar panels into AC electricity, which is the type commonly

used in ...



### **Jinlang Photovoltaic Inverter DC Overvoltage**

Jun 4, 2020 · The condition of DC overvoltage fault in inverter is that the DC capacitor voltage exceeds maximum allowable voltage  $U_{max}$  and maintains for a period of time, which triggers



### **Jinlang Photovoltaic Inverter DC Overvoltage**

Jun 4, 2020 · The inverter is manufactured with internal overvoltage protection on the AC and DC (PV) sides. If the PV system is installed on a building with an existing lightning protection ...

 **LFP 48V 100Ah**

### **CIB Modules Explained: A Guide to Converter, Inverter, and ...**

Jun 30, 2025 · Conclusion: Key Takeaways for Engineers and Designers CIB modules are powerful tools that encapsulate the core functionality of a

modern motor drive into a single, ...



## Photovoltaic inverter overload

Jul 22, 2021 · A solar inverter is a key component in any solar power system, and its function is to convert the direct current (DC) output of the photovoltaic (PV) panels into an alternating

## Huawei inverter error code resolution guide

Oct 4, 2022 · Your inverter will likely protect itself and other components within the system and the user from critical harm. These external factors can be the ...



## Power quality improvement in single-phase

Feb 1, 2023 · The transformerless single-phase semi-quasi-Z-source inverter (SqZSI) provides several advantages over classical PWM converters. Reduced

or eliminated leakage current, ...



## 2040 DC Component Overhigh

Apr 25, 2025 · The DC component in the AC current exceeds the upper threshold. The device detects its external working conditions in real time. After the fault is rectified, the device ...



## Troubleshooting

M:SUN2000L-2KTL,SUN2000L-3KTL,SUN2000L-3.68KTL,SUN2000L-4KTL,SUN2000L-4.6KTL,SUN2000L-5KTL;Smart PV inverter, Smart PV Controller, Cascading



## How Does Input Voltage Affect a Grid-Tie Inverter?

Aug 29, 2019 · In the photovoltaic grid-tie inverter, there are many input voltage technical parameters: Maximum DC input voltage, MPPT operating

voltage ...



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## Contact Us

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For catalog requests, pricing, or partnerships, please visit:  
<https://www.wf-budownictwo.pl>