

Sungrow Error Codes

Code	Meaning	What to do?
002	The grid voltage exceeds inverter allowable upper limit	Check the voltage of the grid. If the grid voltage exceeds the permissible range of inverter protection parameters, ask the utility grid company for a solution. If the grid voltage is within the permissible range, contact First Choice Solar.
003	Grid transient voltage exceeds the permissible range	This is a short-term fault due to grid condition. Inverter should fix itself. If the fault still appears, contact First Choice Solar.
004	The grid voltage is below inverter's allowable lower limit.	Check the grid voltage. If the grid voltage exceeds the permissible range of inverter protection parameters, ask the utility grid company for a solution. If the grid voltage is within the permissible range. If code continues to appear, contact First Choice Solar
005	The grid voltage is too low.	This is a short-term fault due to grid condition. Inverter should fix itself. If the fault still appears, contact First Choice Solar
006	The AC output current exceeds inverter allowable upper limit.	he inverter will resume if the output current falls below the protection value. If the fault still appears, contact First Choice Solar
007	Transient AC overcurrent	The inverter will self-recover after several seconds. If the fault still exists, contact First Choice Solar.
008	The grid frequency exceeds inverter allowable upper limit.	Check the grid frequency. If the grid frequency exceeds the permissible range of inverter protection parameters, ask the utility grid company for a solution. If the grid frequency is within the permissible range, contact First Choice Solar.
009	Grid under-frequency. The grid frequency is below the protective value.	Check the grid frequency. If the grid frequency exceeds the permissible range of inverter protection parameters, ask the utility grid company for a solution. If the grid frequency is within the permissible range, contact First Choice Solar.

010	Islanding	Check whether AC circuit breaker is triggered, the cables are firmly connected. Check whether the grid is not in service. If all conditions are OK and this fault still occurs in the LCD screen, contact First Choice Solar.
011	The DC component of AC current exceeds the inverter limit.	Inverter should fix itself but if the fault still appears, contact First Choice Solar.
012	A failure current is detected	Check the PV strings for ground fault. If the fault still appears, contact First Choice Solar.
014	The average grid voltage exceeds the permissible range for over 10 minutes.	Wait a moment for inverter recovery. Check the voltage of the grid. If the grid voltage exceeds the permissible range of inverter protection parameters, ask the utility grid company for a solution. If the fault still appears, contact First Choice Solar.
015	The grid voltage exceeds the permissible range	Check the model of the AC cables. The inverter should fix itself. Wait a moment for inverter recovery. If the grid voltage exceeds the permissible range of inverter protection parameters, contact First Choice Solar.
016	The bus voltage or power is high.	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
019	Bus transient over-voltage. The transient bus voltage exceeds the protective value.	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
020	Bus over-voltage. The bus voltage exceeds the protective value.	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
021	PV1 input overcurrent is detected	Check the layout and the wiring of PV1 input.
022	PV2 input overcurrent is detected	Check the layout and the wiring of PV2 input.
036	The temperature of radiator is too high	Check whether the placement of the inverter is correct. Check whether the inverter operating ambient temperature is more than the range. Check whether the AC output power exceeds the nominal power. If the fault still appears, contact First Choice Solar.

037	The internal temperature of inverter is too high	Check whether the placement of the inverter is correct. Check whether the inverter operating ambient temperature is more than the range. Check whether the AC output power exceeds the nominal power. If the fault still appears, contact First Choice Solar.
038	Relay fault is detected	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
039	The insulation resistance is low. (ISO-ft)	Check whether the positive and negative of PV panels is short-circuited with ground lead. Inverter should fix itself. If the fault still appears, contact First Choice Solar.
041	Leakage current self-test abnormality	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
047	The PV configuration mode set in the phone application interface is not in accordance with the configuration in the connection cabinet	Disconnect the inverter. Re-select PV configuration mode and re-connect PV strings.
048	Sampling channel failure	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
053	Auxiliary DSP detects grid voltage exceeds set protection value	Check the grid voltage. If the grid voltage exceeds the permissible range of inverter protection parameters, ask the utility grid company for a solution. If the fault still appears, contact First Choice Solar.
054	Auxiliary DSP detects grid frequency exceeds set protection value	Check the grid voltage. If the grid voltage exceeds the permissible range of inverter protection parameters, ask the utility grid company for a solution. If the fault still appears, contact First Choice Solar.
056	Auxiliary DSP detects grid leakage current exceeds set protection range	Check whether there is a grounded fault of the PV string. If the fault still appears, contact First Choice Solar.
057	Auxiliary DSP AC current sampling channel anomaly	Inverter should fix itself. If the fault still appears, contact First Choice Solar.

058	Auxiliary DSP detects AC current DC injection exceeds inverter set protection range	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
059	Main and auxiliary DSP communication anomaly	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
060	Main and auxiliary DSP sampling difference	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
070	Fans are defective	Stop the inverter and disconnect the AC and DC cables. Check whether the fan duct has been blocked. If not, replace fans.
087	Arc self-detection anomaly warn	Wait a while. contact First Choice Solar.
088	Arc anomaly fault	Stop the inverter and disconnect the AC and DC cables. Check cable connection for aging and looseness. Re-power on and remove the arc warn manually. contact First Choice Solar.
089	Arc detection OFF warn	Remove the warn by enable arc detection function or keep the warn by closing arc detection function.
100	The AC output current exceeds inverter protection limit.	The inverter will resume if the output current falls below the protection value. If the fault still appears, contact First Choice Solar.
101	The grid frequency exceeds inverter allowable upper limit.	Check the grid frequency. If the grid frequency exceeds the permissible range of inverter protection parameters, ask utility grid company for solution. If the grid frequency is within the permissible range, contact First Choice Solar.
102	The grid frequency is below the inverter allowable lower limit.	Check the grid frequency. If the grid frequency exceeds the permissible range of inverter protection parameters, ask utility grid company for solution. If the grid frequency is within the permissible range, contact First Choice Solar.
106	The inverter is not grounded	Check whether there is a reliable inverter grounding line, if there is access to the ground, and the fault still exists, contact First Choice Solar.

200	The bus voltage is high	Wait for inverter recovery after bus voltage lower. If the fault still appears, contact First Choice Solar.
201	The bus voltage is too low.	Wait for inverter recovery after bus voltage lower. If the fault still appears, contact First Choice Solar.
202	PV current overcurrent	Wait for inverter recovery after DC current is reduced. If the fault still appears, contact First Choice Solar.
203	The PV input voltage exceeds the bus voltage.	Check the functionality of the PV connection terminals.
205	AC output replay abnormal	Inverter should fix itself. If the fault still appears, contact First Choice Solar.
306	Input and output power mismatching fault	If the fault occurs repeatedly, contact First Choice Solar.
315	PV1 current sampling fault	Channel sampling anomaly, contact First Choice Solar.
316	PV2 current sampling fault	Channel sampling anomaly, contact First Choice Solar.
409	All temperature sensors fail	If the fault occurs repeatedly, contact First Choice Solar.
501	External memory reading/writing warning	Power on the inverter again. If fault persists, contact First Choice Solar.
503	Ambient temperature sensor open circuit warning	If the fault occurs repeatedly, contact First Choice Solar.
504	Ambient temperature sensor short circuit warning	If the fault occurs repeatedly, contact First Choice Solar.
505	Radiator temperature sensor open circuit warning	If the fault occurs repeatedly, contact First Choice Solar.
506	Radiator temperature sensor short circuit warning	If the fault occurs repeatedly, contact First Choice Solar.
514	Abnormal communication warning of the Sungrow meter.	Check whether the power cable connections of the meter are correct. If fault persists, contact First Choice Solar.