

SOLAR ELECTRIC

KOSTAL

PLENTICORE G3

Hybrid inverter



Event list

Legal notice

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General note on gender equality

KOSTAL Solar Electric GmbH is aware of how language impacts on gender equality and always makes an effort to reflect this in documentation. Nevertheless, for the sake of readability we are unable to use non-gender-specific terms throughout and use the masculine form instead.

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Contents

1.	General information.....	4
2.	Service information	5
3.	Type of events	6
4.	Event codes.....	7

1. General information

There is no need to take action when an event occurs occasionally or only briefly and the device resumes operation. When an event persists or recurs frequently, the cause must be determined and rectified.



DANGER

Risk of death due to electrical shock and discharge!

Life-threatening voltages are present in the device. Only a qualified electrician may open and perform work on the device.

If there is a persistent event, the device interrupts the feed-in and switches off automatically.

- Check whether the DC switch or the external DC voltage separator has been switched off.
- Check whether the event is due to a mains power failure, or whether the fuse between the feed meter and the inverter has tripped.

If the fuse has tripped, notify the installer. If there is a power failure, simply wait until the grid operator has corrected the fault.

If the event lasts only a short time (grid fault, overheating, overload, etc.), then the inverter will automatically resume operation as soon as the event has been resolved.

If the event persists, notify your installer or the manufacturer's customer support team.

Provide the following information:

- Device type and serial number. You will find this information on the type plate on the exterior of the housing.
- Description of fault (LED indicator and display message).

The type of event can be determined using the message on the display or Webserver **<Code> <Fault type>** and the following table.

For events that are not listed in the table, please contact the Service team.

2. Service information

For service information and in the event of parts being needed, we require your device type and the serial number. You will find this information on the type plate on the exterior of the housing.

If parts are required, use only original replacement parts.

If you have any technical questions, please call our service hotline:

- Germany and other countries (language: German, English):
+49 (0)761 477 44-222
- Switzerland:
+41 32 5800 225
- France, Belgium, Luxembourg:
+33 16138 4117
- Greece:
+30 2310 477 555
- Italy:
+39 011 97 82 420
- Poland:
+48 22 153 14 98
- Spain, Portugal (language: Spanish, English):
+34 961 824 927

3. Type of events

Type of event	General explanation and actions
Information	No action necessary
System fault	If this error is displayed, the inverter should generally be restarted. To do this, use the DC switch to switch the inverter off. Wait 5 minutes before switching it on again. If this does not help, please contact your installer or call our hotline.
Excess temperature	The device has got too hot. Switch the device off for approx. 20 min. If the error occurs several times/persistently, please contact the Support team.
External grid fault	If the error continues to be displayed after some time has passed, please contact your installer or call our hotline.
External generator fault	Please contact your installer
Fan fault	Please contact your installer
Energy meter fault	Please contact your installer
Battery malfunction	Please contact your installer or our Support team
Battery communication fault	Please contact your installer or our Support team

LED statuses

Explanation of the red LED status.

Red LED	Explanation
Flashing	A warning is active
Lit up	An error is active
Off	Information

4. Event codes

Event code	Red LED	Type of event	Description/possible cause	Action
1002	Flashing	Excess temperature	Excess temperature, AC/DC power level.	Switch off device and allow to cool off. Check installation conditions and fan.
1003	Flashing	Excess temperature	Excess temperature, processor.	Switch off device and allow to cool off. Check installation conditions and fan.
1004	Flashing	Excess temperature	Excess temperature, AC/DC power level.	Switch off device and allow to cool off. Check installation conditions and fan.
1006	Lit up	Excess temperature	Excess temperature, processor	Switch off device and allow to cool off. Check installation conditions and fan.
1007	Lit up	Installation error	Voltage at PV generator 1 too high	Check generator installation/layout.
1008	Lit up	Installation error	Voltage at PV generator 2 too high	Check generator installation/layout.
1009	Lit up	Installation error	Voltage at PV generator 3 too high	Check generator installation/layout.
1010	Lit up	Installation error	Voltage at PV generator 4 too high	Check generator installation/layout.
1011	Off	Information	Overcurrent on the PV generator	Check generator installation/layout. There may be a weather-related problem. Check inverter/generator installation ¹ .
1012	Lit up	Installation error	Negative voltage at PV generator 1.	Check generator installation/layout ¹ .

¹ If the error occurs several times/persistently, please contact the Support team.

4. Event codes

Event code	Red LED	Type of event	Description/possible cause	Action
1013	Lit up	Installation error	Negative voltage at PV generator 2.	Check generator installation/layout ¹ .
1014	Lit up	Installation error	Negative voltage at PV generator 3.	Check generator installation/layout ¹ .
1015	Lit up	Installation error	Negative voltage at PV generator 4.	Check generator installation/layout ¹ .
1016	Lit up	Installation error	Reverse polarity at strings and/or strings have been swapped.	Check generator installation/layout and resolve error.
1020	Lit up	External generator fault	Internal system fault	Check generator installation/layout ¹ .
1022	Off	Information	Power curtailment due to external specifications (grid operator)	No action necessary ¹ .
1023	Off	Information	Power curtailment due to a grid fault (increased grid frequency)	No action necessary ¹ .
1024	Off	External grid fault	Power limitation due to a grid fault	Support.
1025	Lit up	External grid fault	No connection to public grid present	Establish connection to public grid (check fuse, etc.)
1029	Lit up	Battery communication fault	Internal communication error	Restart the device. ¹
1031	Flashing	Battery communication fault	Communication cable to battery faulty	Restart the device. ¹
1032	Flashing	Battery malfunction	Battery faulty	Restart the device. ¹
1033	Flashing	Battery malfunction	Battery faulty	Restart the device. ¹
1034	Flashing	Energy meter fault	Energy meter faulty.	Restart the device. ¹
1036	Off	Battery communication fault	Communication cable to battery faulty.	Check MODBUS communication cable between inverter and battery. ¹

4. Event codes

Event code	Red LED	Type of event	Description/possible cause	Action
1037	Off	Defective over-voltage protection	Internal DC overvoltage protection module is defective. Lightning strike nearby.	Replace the DC over-voltage protection module.
1039	Lit up	System fault	Residual current too high. The problem could be impacted by the weather.	Check installation.
1041	Lit up	System fault	DC residual current detected.	If the event persists, please contact the Support team
1042	Lit up	System fault	Hardware error	Contact support
1043	Lit up	System fault	Hardware error	Contact the Support team.
1044	Lit up	System fault	Insulation resistance lower than the normative limit value. Error can also occur with intact insulation if N and PE are not connected.	Check the PV generator's insulation. The problem could be impacted by the weather. Check the installation of the inverter on the grid side. This problem can be caused by network cables, especially N and PE cables, that are not connected well.
1046	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1047	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1048	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1049	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.

4. Event codes

Event code	Red LED	Type of event	Description/possible cause	Action
1050	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1051	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1052	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1053	Lit up	System fault	Hardware defect	Contact the Support team.
1054	Lit up	System fault	Public grid error	Wait until the public grid is within the normative limits.
1055	Lit up	System fault	Hardware defect	Contact the Support team.
1056	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1057	Off	System fault	Public grid error	Wait until the public grid is within the normative limits.
1058	Lit up	System fault	Voltage at battery input too high.	Please contact your installer.
1060	Lit up	System fault	Hardware defect	Contact the Support team.
1061	Off	System fault	External shutdown detected at the digital inputs.	Wait until the external signal has been cancelled.
1064	Lit up	System fault	At least one relay is fused.	Restart the device.
1065	Lit up	System fault	At least one relay cannot be actuated.	Restart the device. If the event occurs persistently, contact the Support team.

Event code	Red LED	Type of event	Description/possible cause	Action
1071	Lit up	System fault	Internal error	Restart the device. If the event occurs persistently, contact the Support team.
1073	Lit up	System fault	Internal error	Restart the device. If the event occurs persistently, contact the Support team.
1100	Lit up	System fault	Hardware defect	Contact the Support team.
1101	Lit up	System fault	Internal temperature error.	Switch off device and allow to cool off. Check installation conditions and fan.
1106	Off	System fault	Hardware defect	Contact the Support team.
1118	Lit up	System fault	Overvoltage occurred in AC grid.	No action necessary.
6006	Lit up	System fault	Sensor information cannot be retrieved	Check connection to energy meter ¹
6009	Lit up	Battery communication fault	Communication cable to battery faulty	Check communication cable to the battery ¹
6010	Lit up	Fan fault	Fan unit defective	Check fan ¹
6011	Lit up	Fan fault	Fan unit dirty or defective	Check/clean fan ¹
6012	Lit up	Fan fault	Fan unit dirty or defective	Check/clean fan ¹
6013	Lit up	Fan fault	Fan unit dirty or defective	Check/clean fan ¹
6014	Lit up	Energy meter fault	Parameter fault	The KOSTAL Smart Meter's firmware is not up to date. Update firmware. Contact the Support team
6015	Lit up	Battery communication fault	Communication cable to battery faulty	Check communication cable to the battery.
6016	Lit up	Defective overvoltage protection	Lightning strike nearby	Replace overvoltage protection module

4. Event codes

Event code	Red LED	Type of event	Description/possible cause	Action
6017	Lit up	Fan fault	Fan unit dirty or defective.	Check/clean fan.
6018	Lit up	Battery mal-function	The battery system is sending an unknown error.	Contact the Support team.
6019	Lit up	Note	Overload during backup mode.	Do not switch on devices that have high consumption during backup mode.
6020	Lit up	System fault	Wire breakage in signal cable backup switch or switch box	Check and repair cable connection.
6021	Lit up	Note	The public grid has failed. The inverter is ready to start backup mode.	Put backup switch in "House/Battery" position.
6022	Lit up	Note	The public grid is available again. The inverter can be changed back to normal mode.	Put backup switch in "Grid" position.
6023	Lit up	System fault	The inverter detects the "Backup" switch position in normal mode.	Put backup switch back into "Grid" position.
6024	Lit up	System fault	The control signal statuses "In1" and "Relay" are not plausible.	Please acknowledge the message. If the event occurs again, get the installer to check the condition and cabling of the switch box.
6250	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6251	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6252	Lit up	Battery mal-function	Internal system error	Battery needs to be charged via generators
6253	Lit up	Battery mal-function	Internal system error	Contact support
6254	Lit up	Battery mal-function	Ambient temperature too high	Reduce ambient temperature. Check installation conditions

Event code	Red LED	Type of event	Description/possible cause	Action
6255	Lit up	Battery malfunction	Ambient temperature too high or problem with temperature measurement	Contact support
6256	Lit up	Battery malfunction	Ambient temperature too high	Reduce ambient temperature. Check installation conditions
6257	Lit up	Battery malfunction	Ambient temperature too low or problem with temperature measurement	Contact support
6258	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6259	Lit up	Battery malfunction	Hardware error	Contact support
6260	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6261	Lit up	Battery malfunction	Hardware error	Contact support
6262	Lit up	Battery malfunction	Incorrect number of modules set	Correct the number of modules
6263	Lit up	Battery malfunction	Hardware error	Contact support
6264	Lit up	Battery malfunction	Hardware error	Contact support
6265	Lit up	Battery malfunction	Interruption on communication cables or incorrect number of modules set	Check communication cables, correct the number of modules ¹
6266	Off	Information	Internal system error	No action necessary ¹
6267	Off	Information	Internal system error	No action necessary ¹
6268	Lit up	Battery malfunction	Hardware error	Contact support
6300	Lit up	Battery malfunction	Charging was prevented too late.	Wait for discharging, increase home consumption.

Event code	Red LED	Type of event	Description/possible cause	Action
6301	Lit up	Battery malfunction	Charging was prevented too late.	Wait for discharging, increase home consumption.
6302	Lit up	Battery malfunction	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged via generators.
6303	Lit up	Battery malfunction	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Contact the Support team
6304	Lit up	Battery malfunction	Ambient temperature too high or problem with temperature measurement.	Reduce ambient temperature. Check installation conditions.
6305	Lit up	Battery malfunction	Ambient temperature too high or problem with temperature measurement.	Contact the Support team.
6306	Lit up	Battery malfunction	Ambient temperature too high or problem with temperature measurement.	Check ambient temperature.
6307	Lit up	Battery malfunction	Ambient temperature too high or problem with temperature measurement.	Contact the Support team.
6308	Lit up	Battery malfunction	Incorrect current measurement.	No action necessary.
6309	Lit up	Battery malfunction	Inverter defective or BMU current measurement defective.	Contact the Support team.
6310	Lit up	Battery malfunction	Incorrect current measurement.	No action necessary.
6311	Lit up	Battery malfunction	Inverter defective or BMU current measurement defective.	Contact the Support team.
6312	Lit up	Battery malfunction	Incorrect number of modules set.	Correct the number of modules. Completely disconnect system (AC/DC) and restart.

Event code	Red LED	Type of event	Description/possible cause	Action
6313	Lit up	Battery mal-function	Short circuit on DC cables or relay error in the BMU.	Completely disconnect system (AC/DC) and re-start.
6314	Lit up	Battery mal-function	Old and new battery modules have been used together or cell defect.	Contact the Support team.
6315	Lit up	Battery mal-function	Interruption on communication cables or incorrect number of modules set.	No action necessary.
6316	Off	Battery mal-function	Software renewed.	No action necessary.
6317	Off	Battery mal-function	Restart launched.	No action necessary.
6318	Lit up	Battery mal-function	Charging relay defective or communication error or very low or very high cell voltage.	Contact the Support team.
6319	Lit up	Battery mal-function	Fused relay contacts.	Contact the Support team.
6320	Lit up	Battery mal-function	Defective cabling or hardware defect	Contact the Support team.
6500	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6501	Flashing	Battery mal-function	Internal system error	Battery needs to be charged via generators.
6504	Flashing	Battery mal-function	Internal system error	No action necessary ¹
6505	Flashing	Battery mal-function	Internal system error	No action necessary ¹
6506	Flashing	Battery mal-function	Internal system error	No action necessary ¹
6507	Flashing	Battery mal-function	Internal system error	No action necessary ¹
6508	Flashing	Battery mal-function	Internal system error	No action necessary ¹

Event code	Red LED	Type of event	Description/possible cause	Action
6510	Flashing	Battery malfunction	Ambient temperature too high	Check ambient temperature and installation conditions.
6511	Flashing	Battery malfunction	Ambient temperature too low	Check ambient temperature and installation conditions.
6512	Flashing	Battery malfunction	Internal system error	No action necessary ¹
6520	Flashing	Battery malfunction	Internal system error	No action necessary ¹
6530	Lit up	Battery malfunction	Charging was prevented too late.	Wait for discharging, increase home consumption.
6531	Lit up	Battery malfunction	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged.
6534	Lit up	Battery malfunction	Hardware error	Contact the Support team.
6535	Lit up	Battery malfunction	Hardware error	Contact the Support team.
6536	Lit up	Battery malfunction	Hardware error	Contact the Support team.
6537	Lit up	Battery malfunction	Hardware error	Contact the Support team.
6538	Lit up	Battery malfunction	Hardware error	Contact the Support team.
6539	Lit up	Battery malfunction	Hardware error	Contact the Support team.
6540	Lit up	Battery malfunction	Ambient temperature too high	Check ambient temperature and installation conditions.
6541	Lit up	Battery malfunction	Ambient temperature too low	Check ambient temperature and installation conditions.

Event code	Red LED	Type of event	Description/possible cause	Action
6542	Lit up	Battery mal-function	Hardware error	Contact the Support team.
6543	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6550	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6554	Lit up	Battery mal-function	Hardware error	Contact the Support team.
6560	Lit up	Battery mal-function	Charging was prevented too late.	Wait for discharging, increase home consumption.
6561	Lit up	Battery mal-function	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged.
6562	Lit up	Battery mal-function	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged.
6563	Lit up	Battery mal-function	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged.
6565	Lit up	Battery mal-function	Hardware error	Contact the Support team.
6566	Lit up	Battery mal-function	Hardware error	Contact the Support team.
6567	Lit up	Battery mal-function	Internal system error	Contact the Support team.
6568	Lit up	Battery mal-function	Internal system error	Contact the Support team.
6570	Lit up	Battery mal-function	Ambient temperature too high	Check ambient temperature. Check installation conditions.
6571	Lit up	Battery mal-function	Ambient temperature too low	Check ambient temperature. Check installation conditions.

Event code	Red LED	Type of event	Description/possible cause	Action
6573	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6574	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6579	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6583	Lit up	Battery mal-function	Hardware error	Contact the Support team.
6584	Lit up	Battery mal-function	Hardware error	Contact the Support team.
6590	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6656	Lit up	Battery mal-function	Ambient temperature too low	Check ambient temperature and installation conditions.
6657	Lit up	Battery mal-function	Ambient temperature too high	Check ambient temperature and installation conditions.
6658	Lit up	Battery mal-function	Internal system error	Contact the Support team.
6659	Lit up	Battery mal-function	Internal system error	Contact the Support team.
6670	Lit up	Battery mal-function	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged.
6671	Lit up	Battery mal-function	Charging was prevented too late.	Wait for discharging. Increase home consumption.
6672	Lit up	Battery mal-function	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged.
6673	Lit up	Battery mal-function	Charging was prevented too late.	Wait for discharging. Increase home consumption.

Event code	Red LED	Type of event	Description/possible cause	Action
6674	Lit up	Battery malfunction	Discharging was prevented too late or the system went into deep discharge via self-consumption.	Battery needs to be charged.
6675	Lit up	Battery malfunction	Charging was prevented too late.	Wait for discharging. Increase home consumption.
6676	Lit up	Battery malfunction	Ambient temperature too low	Check ambient temperature. Check installation conditions.
6677	Lit up	Battery malfunction	Ambient temperature too high	Check ambient temperature. Check installation conditions.
6678	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6679	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6680	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6681	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6682	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6683	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6684	Lit up	Battery malfunction	Charging was prevented too late.	Wait for discharging. Increase home consumption.
6685	Lit up	Battery malfunction	Faulty wiring	Check installation/wiring
6686	Lit up	Battery malfunction	Internal system error	No action necessary ¹
6687	Lit up	Battery malfunction	Internal system error	Contact the Support team.
6688	Lit up	Battery malfunction	Internal system error	Contact the Support team.

4. Event codes

Event code	Red LED	Type of event	Description/possible cause	Action
6689	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6690	Lit up	Battery mal-function	Internal system error	No action necessary ¹
6691	Lit up	Battery mal-function	Cable interruption or wiring error on communication cable	Check wiring

1) If the error occurs several times/persistently, please contact the Support team.

