

Alarm List

Version: 01
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Alarm List

ALARM CODE	ALARM CODE DESCRIPTION	ID CODE	ID CODE DESCRIPTION	POSSIBLE CAUSE	SUGGESTION
1001	Software version mismatch	ID1	Inverter software version mismatch	· The device internal software version does not match	If the upgrade is unsuccessful, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	Inverter software and hardware version		
		ID3	The protocol version between devices mismatch		
1002	Low insulation resistance	ID1	Low insulation resistance	· The PV string is triggered short-circuit protection mechanism, or the PV string installation environment is humid for a long time	1. Check the DC cable for short circuits or broken cables. 2. Check whether the positive and negative poles of the DC cable are shorted to the ground. 3. If the cable is normal and the fault occurs on rainy days, confirm again after the weather improves. 4. Check whether the ISO impedance protection value is too high through the APP to confirm that it meets the requirements of local regulations. 5. If it is not due to the above reasons and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
1003	The temperature is too high	ID1	The inverter temperature is high	· The ambient temperature is too high, or the equipment located area is not well ventilated · The internal power module of the device is working abnormally	Generally, the machine will be restarted after the internal temperature or module temperature returns to normal, if the failure occurs repeatedly: 1. Check whether the ventilation of the installation location of the equipment is good and improved. 2. Check whether the device is exposed to direct light and improve. 3. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
1004	Equipment failure	ID1	The power module is abnormal	· The internal circuitry of the device has failed	1. Give standby/shutdown instructions, disconnect the DC and AC switches, and wait a few minutes until the device is completely powered down. 2. Restore DC and AC switches and give boot instructions. 3. If the fault does not disappear, please submit the fault feedback on the APP-service-support-troubleshooting page.
		ID2	The control module is abnormal		
		ID3	The accessory power supply module is abnormal		
		ID4	Built-in PID module is abnormal		
		ID5	The monitoring module is abnormal		
1005	the system grounding is abnormal	ID1	the system grounding is abnormal	· The protective ground wire is not grounded	1. Check whether the protective ground wire is connected normally. 2. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
1006	PV string voltage is high	ID1	String 1 input overvoltage	· PV string connected too much, or the open circuit voltage is greater than the maximum input voltage specification	Generally, the machine will restart after waiting for the external environment to return to normal, if the failure occurs repeatedly: 1 Measure whether the PV voltage of the corresponding alarm string exceeds the system voltage. 2. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	String 2 input overvoltage		
		ID3	String 3 input overvoltage		
		ID4	String 4 input overvoltage		
		ID5	String 5 input overvoltage		
		ID6	String 6 input overvoltage		
		ID7	String 7 input overvoltage		
		ID8	String 8 input overvoltage		
		ID9	String 9 input overvoltage		
		ID10	String 10 input overvoltage		
		ID11	String 11 input overvoltage		
		ID12	String 12 input overvoltage		
		ID13	String 13 input overvoltage		
		ID14	String 14 input overvoltage		
		ID15	String 15 input overvoltage		
		ID16	String 16 input overvoltage		
1007	PV string reverse connection	ID1	String 1 reversed	· PV strings positive and negative polarity reversed	1. Check whether the positive and negative poles of the corresponding alarm string are reversed, if so, wait for the PV string current to decrease below 05A, disconnect the DC switch and adjust the polarity of the corresponding string. 2. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	String 2 reversed		
		ID3	String 3 reversed		
		ID4	String 4 reversed		
		ID5	String 5 reversed		
		ID6	String 6 reversed		
		ID7	String 7 reversed		
		ID8	String 8 reversed		
		ID9	String 9 reversed		
		ID10	String 10 reversed		
		ID11	String 11 reversed		
		ID12	String 12 reversed		
		ID13	String 13 reversed		
		ID14	String 14 reversed		
		ID15	String 15 reversed		
		ID16	String 16 reversed		

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1008	PV string backfilling	ID1	String 1 backfilling	· The PV string configuration is inconsistent	If the battery board configuration is normal and the fault does not disappear, please submit fault feedback on the APP-service-support-troubleshooting page. 1. Check whether the number of panels corresponding to the alarm string configuration is less than other strings, if so, wait for the PV string current to decrease below 05A, disconnect the DC switch and adjust the string panel configuration. 2. Check whether the string battery panel is occluded, if so, improve the occlusion or clean the panel. 3. Check whether the orientation of the string battery board is abnormal; if yes, adjust the panel orientation. 4. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	String 2 backfilling		
		ID3	String 3 backfilling		
		ID4	String 4 backfilling		
		ID5	String 5 backfilling		
		ID6	String 6 backfilling		
		ID7	String 7 backfilling		
		ID8	String 8 backfilling		
		ID9	String 9 backfilling		
		ID10	String 10 backfilling		
		ID11	String 11 backfilling		
		ID12	String 12 backfilling		
		ID13	String 13 backfilling		
		ID14	String 14 backfilling		
		ID15	String 15 backfilling		
		ID16	String 16 backfilling		
1009	AFCI fault	ID1	String 1 AFCI fault	· The DC cable is damaged · Poor contact of string connection terminals	1. Disconnect the PV DC switch, check whether the corresponding alarm string has DC side cable damage, poor contact of connection terminals, burning marks, etc, if so, replace the broken cable, tighten the connection terminal or replace the parts with burning marks. 2. Re-close the PV DC switch, clear the AFCI fault through the APP, and re-operate the equipment. 3. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	String 2 AFCI fault		
		ID3	String 3 AFCI fault		
		ID4	String 4 AFCI fault		
		ID5	String 5 AFCI fault		
		ID6	String 6 AFCI fault		
		ID7	String 7 AFCI fault		
		ID8	String 8 AFCI fault		
		ID9	String 9 AFCI fault		
		ID10	String 10 AFCI fault		
		ID11	String 11 AFCI fault		
		ID12	String 12 AFCI fault		
		ID13	String 13 AFCI fault		
		ID14	String 14 AFCI fault		
		ID15	String 15 AFCI fault		
		ID16	String 16 AFCI fault		
1010	Grid outage	ID1	Power loss of the grid	· The grid power is outage or the AC switch is disconnected	Under normal circumstances, the inverter will be reconnected to the grid after the grid returns to normal if the failure recurs: 1. Check whether the grid is reliably supplied. 2. Check whether the AC switch is open and whether the AC circuit breaker is closed. 3. Confirm whether the off-grid function is enabled (for off-grid products). 4. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
1011	Grid overvoltage	ID1	Grid overvoltage level 1 alarm	· The grid voltage is exceed the level 1 overvoltage protection value	Under normal circumstances, the inverter will be reconnected to the grid after the grid returns to normal if the failure occurs repeatedly. 1. Measure the actual grid voltage, if the grid voltage is higher than the set value, contact the local power operator for a solution. 2. Check the setting of the protection parameters through the APP, and modify the overvoltage protection value after obtaining the consent of the local power operator. 3. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	Grid overvoltage level 2 alarm	· The grid voltage is exceed the level 2 overvoltage protection value	
		ID3	Grid overvoltage level 3 alarm	· The grid voltage is exceed the level 3 overvoltage protection value	
1012	Grid undervoltage	ID1	Grid undervoltage level 1 alarm	· The grid voltage is less than the level 1 undervoltage protection value	Under normal circumstances, the inverter will be reconnected to the grid after the grid returns to normal if the failure occurs repeatedly 1 Measure the actual grid voltage, and if the grid voltage is lower than the set value, contact the local power operator for resolution. 2 Check whether the settings of the APP protection parameters meet the requirements. 3 To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	Grid undervoltage level 2 alarm	· The grid voltage is less than the level 2 undervoltage protection value	
		ID3	Grid undervoltage level 3 alarm	· The grid voltage is less than the level 3 undervoltage protection value	
1013	Grid overfrequency	ID1	Grid overfrequency level 1 alarm	· The grid frequency is exceed the level 1 overfrequency protection value	Under normal circumstances, the inverter will be reconnected to the grid after the grid returns to normal if the failure occurs repeatedly: 1. Measure the actual grid frequency, and if the grid frequency is indeed outside the set range, contact the local power operator for resolution. 2. Check whether the setting of protection parameters meets the requirements through the APP.
		ID2	Grid overfrequency level 2 alarm	· The grid frequency is exceed the level 2 overfrequency protection value	

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		ID3	Grid overfrequency level 3 alarm	· The grid frequency is exceed the level 3 overfrequency protection value	3. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
1014	Grid underfrequency	ID1	Grid underfrequency level 1 alarm	· The grid frequency is less than the level 1 underfrequency protection value	Under normal circumstances, the inverter will be reconnected to the grid after the grid returns to normal if the failure occurs repeatedly: 1. Measure the actual grid frequency, and if the grid frequency is indeed outside the set range, contact the local power operator for resolution. 2. Check whether the setting of protection parameters meets the requirements through the APP. 3. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	Grid underfrequency level 2 alarm	· The grid frequency is less than the level 2 underfrequency protection value	
		ID3	Grid underfrequency level 3 alarm	· The grid frequency is less than the level 3 underfrequency protection value	
1015	Grid voltage imbalance	ID1	Grid voltage imbalance	· Phase angle imbalance of three-phase power grid · The amplitude of the three-phase grid is imbalanced	Under normal circumstances, the inverter will be reconnected to the grid after the grid returns to normal if the failure occurs repeatedly: 1. Measure the actual grid voltage, if the phase voltage amplitude or phase difference of each phase of the power grid is large, please contact the current power company for a solution. 2. To confirm that the above reasons are not the above and the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
1016	The DC component of the output current exceeds the limits	ID1	The DC component of the output current exceeds the limits	· The DC component in the AC output current is greater than the set value	1. If it occurs by chance, it may be caused by transient sudden changes in the environment, and the equipment will resume normal operation after the external environment is stabilized without manual intervention. 2. If it occurs frequently or cannot be recovered for a long time, please submit fault feedback on the APP-service-support-troubleshooting page.
1017	The leakage electricity exceeds the limits	ID1	The leakage electricity exceeds the limits	The leakage electricity exceeds the protection threshold	1. If it occurs by chance, it may be caused by the instantaneous sudden change of external impedance, and the integrated opportunity will resume normal operation after the external environment is stabilized, no manual intervention needed. 2. If it occurs frequently or cannot be recovered for a long time, please submit fault feedback on the APP-service-support-troubleshooting page.
1018	Communication abnormal	ID1	4G Communication abnormal	· 4G data is insufficient or SIM card is not inserted · Poor contact of internal communication sticks	Please check the 4G data, if the data is insufficient, please recharge 1.If the 4G data is sufficient, please reset the 4G Dongle and wait for the 4G communication to be restored. 2.If the fault does not go away, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	CAN Communication abnormal	· Poor contact at the connection of the floating terminal · The CAN module functioning abnormal	1. Restart the device and wait for it to return to normal. 2. If the fault does not disappear, please submit the fault feedback on the APP-service-support-troubleshooting page.
		ID3	Meter communication abnormal	· The meter terminal block is poorly connected to the all-in-one equipment	1. Check whether the meter communication port is connected reliably. 2. If the fault does not disappear, please submit the fault feedback on the APP-service-support-troubleshooting page.
1019	System internal protection	ID1	MPPT1 overcurrent protection	·The MPPT overcurrent protection mechanism is triggered	1. If it occurs by chance, it may be caused by transient sudden changes in the environment, and the equipment will resume normal operation after the external environment is stabilized, no manual intervention needed. 2. If it occurs frequently or cannot be recovered for a long time, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	MPPT2 overcurrent protection		
		ID3	MPPT3 overcurrent protection		
		ID4	MPPT4 overcurrent protection		
		ID5	MPPT5 overcurrent protection		
		ID6	MPPT6 overcurrent protection		
		ID7	MPPT7 overcurrent protection		
		ID8	MPPT8 overcurrent protection		
		ID9	MPPT9 overcurrent protection		
		ID10	MPPT10 overcurrent protection		
		ID11	MPPT11 overcurrent protection		
		ID12	MPPT12 overcurrent protection		
		ID13	MPPT13 overcurrent protection		
		ID14	MPPT14 overcurrent protection		
		ID15	MPPT15 overcurrent protection		
		ID16	MPPT16 overcurrent protection		
		ID17	Inverter output overcurrent protection	· The inverter overcurrent protection mechanism is triggered	

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		ID18	BUS overvoltage protection	·The internal BUS overvoltage protection mechanism is triggered	
		ID19	Internal BUS voltage imbalance protection	·The internal BUS voltage imbalance protection is triggered	
2001	Software version mismatch	ID1	Software version mismatch	· The system internal software version mismatch	1. Please upgrade the system software again. 2. If the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	The hardware and software versions mismatch		
2002	The energy storage module has low insulation resistance to ground	ID1	The energy storage module has low insulation resistance to ground	· The energy storage internal module is shorted to the chassis	1. Issue standby/shutdown command through the APP, disconnect the DC and AC switches, wait few minutes until the device is completely powered off. 2. Turn on the DC and AC switches and issue startup command through the APP. 3. If the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
2003	The temperature is too high	ID1	The energy storage power module temperature is high	· The ambient temperature is too high, or the equipment located area is not well ventilated · The internal power module of the device is working abnormally	1. Check and make sure the ventilation are of the equipment installation location is good. 2. Check and make sure the equipment is not exposed to direct sun and improve. 3. If the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	The energy storage battery module temperature is high		
2004	Equipment failure	ID1	The energy storage control circuit is abnormal	· The internal circuitry of the device has fault	1. Issue standby/shutdown command through the APP, disconnect the DC and AC switches, wait few minutes until the device is completely powered off. 2. Turn on the DC and AC switches and issue startup command through the APP. 3. If the fault still exists, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	The energy storage battery module is abnormal		
		ID3	The accessory power supply module is abnormal		
		ID4	Main and secondary communication abnormal		
2005	The temperature is too low	ID1	The energy storage battery module temperature is low	· The ambient temperature is too low	1. Wait the system self heating and reached to the operating temperature range of the equipment, fault will recover and system working normal. 2. If the ambient temperature rises to the operating temperature range of the device and the fault not disappear, please submit fault feedback on the APP-service-support-troubleshooting page.
2006	Battery module overvoltage	ID1	Battery module overvoltage	· The battery module or the internal cells voltage is too high Battery module overcharged	Please submit a fault feedback on the APP-service-support-troubleshooting page.
2007	The battery module is undervoltage	ID1	The battery module is undervoltage	· The battery module or the internal cells voltage is too low Battery module over discharged due to long time storage	Please submit a fault feedback on the APP-service-support-troubleshooting page.
2008	System internal protection	ID1	Power module input overvoltage protection	· The internal overvoltage protection mechanism is triggered · The internal overcurrent protection mechanism is triggered	1. If it occurs by chance, it may be caused by transient changes in the environment, and the device will return to normal after the external environment is stable. 2. If it occurs frequently or cannot be recovered for a long time, please submit fault feedback on the APP-service-support-troubleshooting page.
		ID2	Power module output overvoltage protection		
		ID3	Power module overcurrent protection		
		ID4	Internal series module voltage imbalance		
		ID5	The internal parallel modules current imbalance	· The internal voltage imbalance protection mechanism is triggered · The internal current imbalance protection mechanism is triggered	