

Zever Solar General Trouble Shooting Guide - Effective Jan 2014

Status	Displayed Message	Definition of Message	Solution to resolve	Contact
Initialization	Waiting	Initial PV voltage is between Min. DC input voltage and start-up DC input voltage of the inverter.		Zeversolar Australia Service Center Contact Information: 1. Toll-free Hotline Phone No.: +61(0)1300101883-1 Working hour: 09:00-17:00 (West Australia Time) 2. Email Email Address: service.apac@zeversolar.com 3. On-line Claim. You can always claim your service demand on our website. http://www.zeversolar.com/form/online.htm
	Checking	The inverter is checking feeding conditions after initial PV voltage exceeds start-up DC input voltage of the inverter.		
	Reconnect	The inverter is checking feeding conditions after the last fault has been solved.		
Normal	Normal	The inverter is operating normally.		
Flash	F/W Updating	Update the MCU firmware		
Fault	GFCI Failure	GFCI detection circuit is abnormal.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	AC HCT Failure	Output current sensor is abnormal.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	High DC Bus	The voltage of DC bus exceeds the permitted upper limit.	<ul style="list-style-type: none"> Check the open-circuit voltages of the strings, make sure it is lower than the Max. DC input voltage of the inverter; If the input voltage lies within the permitted range, and the fault still occurs, maybe the internal circuit has broken, please call service center. 	
	Utility Loss	The utility cannot be detected, which may be caused by no utility, grid disconnected, AC cable damage, fuse broken or island.	<ul style="list-style-type: none"> Check the fuse and the triggering of the mains circuit breaker in the distribution box. Check grid voltage, grid usability. Check AC cable, grid connection on the inverter. If this fault is still being shown, please call service center. 	
	Over Temperature	The internal temperature exceeds the permitted value.	<ul style="list-style-type: none"> Check whether the airflow to the heat sink is obstructed. Check whether the ambient temperature around the inverter is too high. 	
	Fac Failure	The grid frequency lies outside the permitted range.	<ul style="list-style-type: none"> Check the grid frequency and observe how often major fluctuations occur. If this fault is caused by the frequent fluctuations, try to modify the operating parameters after informing the utility provider first. 	
	Vac Failure	The grid voltage lies outside the permitted range.	<ul style="list-style-type: none"> Check the grid voltage and grid connection on the inverter. Check the grid voltage at the point of connection of the inverter. If the grid voltage lies outside the permissible range due to local grid conditions, try to modify the monitored operating limits after informing the utility provider first. If the grid voltage lies within the permitted range and this fault still occurs, please call service center. 	
	PV Overvoltage	The voltage of the strings exceeds the permitted upper limit.	<ul style="list-style-type: none"> Check the open-circuit voltages of the strings, make sure it is lower than the Max. DC input voltage of the inverter. If the input voltage lies within the permitted range and the fault still occurs, please call service center. 	
	Ground I Fault	The residual current exceeds the permitted upper limit.	<ul style="list-style-type: none"> Make sure the earth connection of the inverter is reliable. Make a visual inspection of all PV cables and modules. If this fault is still shown, please call service center. 	
	DC INJ High	Output DC injection exceeds the permitted upper limit.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	Isolation Fault	The PV generator's insulation resistance to earth is below the permitted value or the electrical insulation inside the inverter has failed	<ul style="list-style-type: none"> Check the PV generator's insulation to earth, make sure that the insulation resistance to earth is greater than 1MΩm; Otherwise, make a visual inspection of all PV cables and modules. Make sure the earth connection of the inverter is reliable. If this fault is still shown, please call service center. 	
	DC Inj. differs for M-S	Different value of DC injection has been detected by the master and slave MCU.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	Ground I differs for M-S	Different value of residual current has been detected by the master and slave MCU.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	Fac differs for M-S	Different value of grid frequency has been detected by the master and slave MCU.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	Vac differs for M-S	Different value of grid voltage has been detected by the master and slave MCU.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	Fac, Vac differs for M-S	Different value of grid frequency and voltage has been detected by the master and slave MCU.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	Relay-Check Fail	Output relay has failed.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
	EEPROM /R/W Fail	Reading or writing of EEPROM fails	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 	
SCI Failure	Communication between the master and slave CPU has failed.	<ul style="list-style-type: none"> Disconnect the inverter from the grid and the PV generator, reconnect them after 3 minutes. If this fault is still being shown, please call service center. 		
Device Fault	Unknown Error	call service center		

To reset the solar inverter, proceed as follows:

1. Disconnect the solar inverter from the AC grid by opening the AC circuit breaker.
2. Switch off the DC isolator switch.
3. Wait: approx. 3 minute.
4. Switch DC Isolator switch back on.
5. Reconnect to AC grid