

Topic	LED Status Indicator Tables				
Products	Eclipse Inverter				
Bulletin No.	PNo 6975	Revision	6	Date	09/06/2020

CONTENTS

Scope	1
LED Status Indicator Table - Inverter Operation.....	2
LED Status Indicator Table - Inverter WiFi Communications	3
LED Status Flow Chart - Inverter Operation	4
LED Status Flow Chart - Normal Inverter Operation.....	5

Scope

This document covers the 5120 Eclipse Inverter Status LED Indicators and explains the meaning of the different LED behaviours. This document is applicable to the 5120 MCU firmware PNo 5887 v3.78 or higher.

The LED Status Indicator Table - Inverter Operation is for the green and red LEDs.



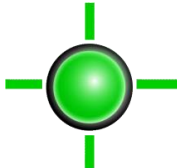




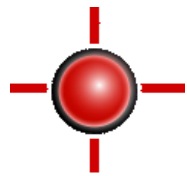


The LED Status Indicator Table - Inverter WiFi Communications is for the blue LED.

The LED Status Flow Chart - Inverter Operation shows how the LED Status changes for different conditions.

The LED Status Flow Chart – Normal Inverter Operation shows the LED Status changes for normal daily operating conditions without any faults.

Text in [square brackets] is for MIL-Systems reference only and is not included for the Status Tables used in the Installation and Operation Manual.

LED Status Indicator Table - Inverter Operation

					
	OFF No AC available No PV Solar available	Night AC ON No PV Solar available	Grid Connecting [After start-up tests] 60 sec countdown	Start Up Tests [DSPs performing start up tests and assessing AC & DC voltages] AC ON PV Solar available	Day Generating PV Solar available Grid connected
		Grid Disconnected by DRED DRM 0 Operation PAUSED		Initialising [Waiting for DSPs to initialise then sending parameters to DSPs DC is on, AC is not known] PV Solar available	Power Output Reduced [VSI Current limited by high temp] Priority 6, Note 3 Generation limited due to high temperature Grid connected
	AC OFF [Grid voltage <= 100V] PV Solar available	Operating Error [Any DSP fault bit other than Array Insulation, Relay or RCD] Priority 4, Note 3 Operation INTERRUPTED (Self retry or next day retry, Note 2)	Waiting for Grid OK [AC voltage or freq out of range, not connected since AC or DC off] Priority 5, Note 3 Operation PAUSED Grid Voltage too high Grid Frequency bad (Self retry)	Start Up Tests Delayed [Start-up tests not completed in normal time] Operation PAUSED AC ON PV Solar available (Self retry)	Grid Bad [AC voltage or freq out of range] Priority 5, Note 3 Operation PAUSED Grid disconnected Grid Voltage too high Grid Frequency bad (Self retry)
	Installation Fault Priority 1, Note 3 Operation STOPPED AC or PV Mis-wired (Restart from AC OFF and DC OFF)	Start Up Test Fault Priority 3, Note 3 Operation INTERRUPTED ALARM asserted, Note 1 <ul style="list-style-type: none"> PV Array Insulation Fault (Self retry) RCD or AC Relay Self Test Fault (next day retry, Note 2) 		RCD Earth Leakage Trip Priority 2, Note 3 Operation INTERRUPTED ALARM asserted, Note 1 (Next day retry, Note 2)	
	Start Up Error [Failed 3 times starting DSPs or sending parameters] Operation INTERRUPTED (Next day retry, Note 2)				

Note 1: The **ALARM** will clear the next day when the Inverter has completed **Start Up Tests** without fault.

Note 2: The next day retry can be done manually by turning DC OFF then ON while PV Solar is available.

Note 3: Priority X is the priority assigned to various fault conditions with 1 being the highest priority. Where more than one fault condition is present at the same time, the fault with the highest priority will be the one indicated by the LEDs. Faults with the same priority cannot be present at the same time.

LED Status Indicator Table - Inverter WiFi Communications



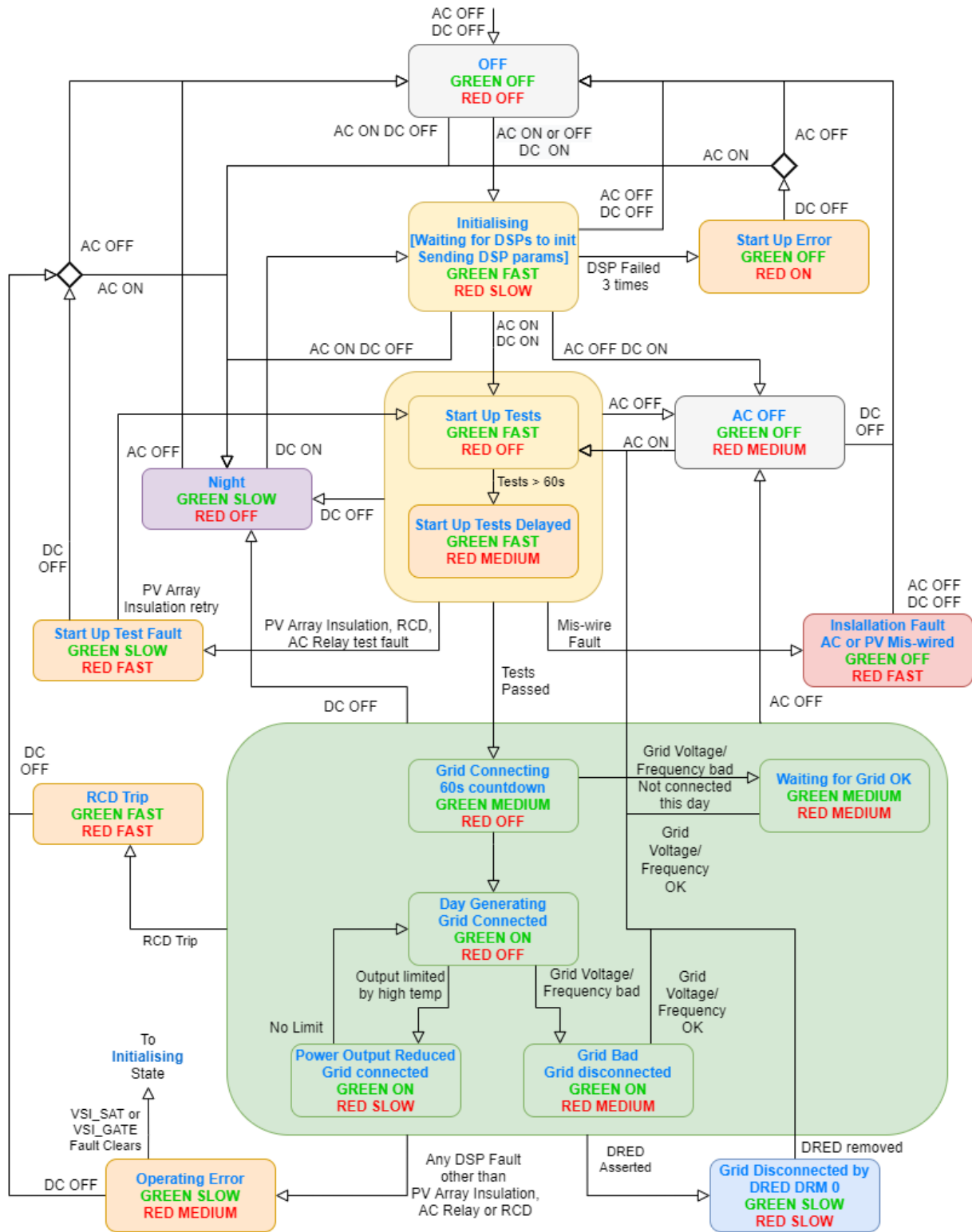
When the inverter WiFi is sending or receiving data the blue LED will flicker irregularly.

	Status	Details
	OFF	There is no AC or PV Solar available to the Inverter.
	Standalone Mode	<p>When starting from AC OFF and DC OFF the Inverter always starts in Standalone Mode. This allows devices such as smart phones and tablets to search and find the Inverter's standalone WiFi and connect to it. This mode is for installation configuration and set-up, and for changing WiFi network set-up & password in the future.</p> <p>This mode is for users without a home WiFi network to view and monitor the inverter.</p> <p>If the inverter WiFi had previously been connected to the home WiFi network it will start in Standalone Mode then after 5 minutes it will automatically reconnect to the home WiFi network it has saved.</p> <p>To change a saved home WiFi network it must be cleared by the inverter set-up while in Standalone Mode, refer to page XX for instructions.</p> <p>The Inverter will only enter Standalone Mode when starting from AC OFF and DC OFF.</p>
	Home Network Mode Connected	The Inverter has successfully connected to the home WiFi network and communications are operating normally.
	Failed to Connect to Network	<p>Network connection failed.</p> <p>The Inverter has been configured to a home WiFi network but was unable to reconnect, or has lost communications. The inverter will keep trying to reconnect to a saved home WiFi network.</p> <p>To re-establish WiFi connection, restart the inverter by turning AC OFF and DC OFF, then ON again, then wait for 5 minutes for automatic reconnection.</p> <p>If the inverter is still unable to connect to the home WiFi network, re-configure the WiFi network from Standalone mode. Refer to Installation Manual for instructions. This may be required if the network WAP/router has been reset or the home WiFi network name or passphrase has changed.</p>

Legend

	OFF		Slow Rate 1 Flash per 4 Seconds		Medium Rate 1 Flash per Second		Fast Rate 4 Flashes per Second		ON Constant
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LED Status Flow Chart - Inverter Operation



Legend

AC OFF	DC ON Initialising	Normal Day	Normal Night
Fault Next day or self retry	Fault Restart from AC OFF and DC OFF	DRED Control	

RCD: Residual Current Device (Earth Leakage detection)
 DSP: Digital Signal Processor (PV power converter)

LED Status Flow Chart - Normal Inverter Operation

