Go Power GP-PWM-30-FM-DL 30AMP Solar Controller User Guide

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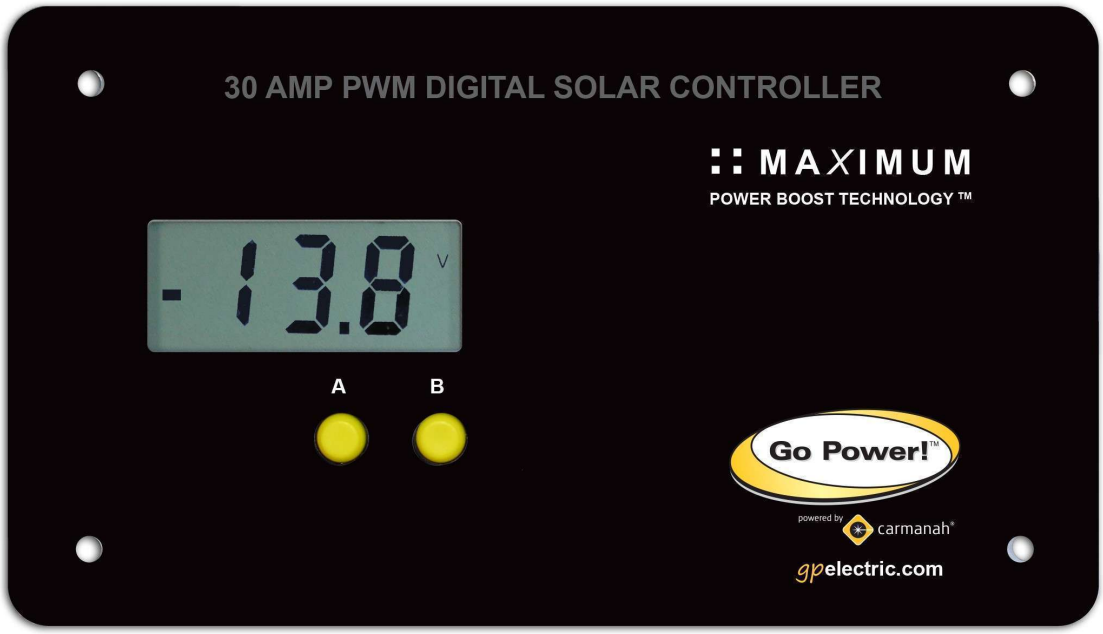


OVERVIEW

NO.	DESCRIPTION	NO.	DESCRIPTION
1	LCD Screen	5	Mounting hole size φ4.5mm
2	B Button	6	PV Terminals
3	A Button	7	Battery Terminals
4	Controller Case		

GENERAL INFORMATION

The SOLAR CONTROLLER is suitable for use with lead acid batteries (vented, GEL, or AGM type) as well as some lithium iron phosphate (LiFePO4) batteries that are supplied with a Battery Management System (BMS). If using lithium ion, it must be lithium iron phosphate (LiFePO4) chemistry with a BMS. No other chemistries are compatible. Lithium batteries typically have maximum allowed charge currents. These maximums typically decrease in cold temperatures. The solar controller does not limit current for these restrictions, and system design of the solar array must account for this.

- Be sure to follow all battery manufacturer safety instructions.

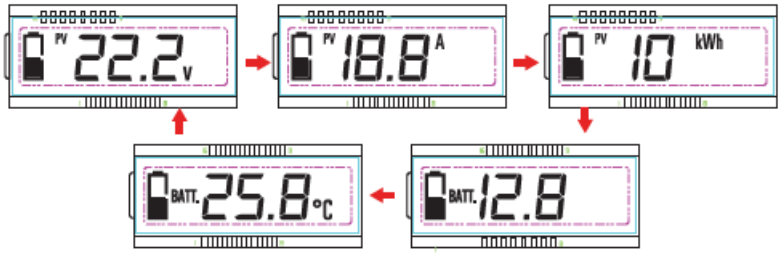
- The controller will not work unless there is a battery connected to the Battery terminals

DISPLAY SYMBOLS

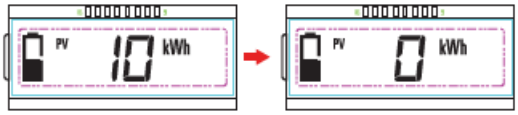
ICON	MOTION	ISSUE
	Solid	The system is normal but not charging
	Energy bars are Flashing	Charging
	Solid	Full
	Flashing	Battery Overvoltage
	Flashing	Battery Over Discharge

OPERATING INSTRUCTIONS

1. Cycle through the following display parameters by pressing the set and menu buttons.

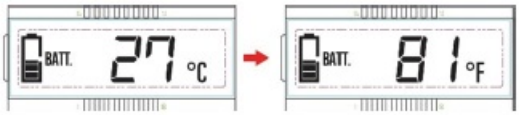


   Display: PV voltage, PV current, PV power, Battery voltage and Battery temperature
2. Clear the generated energy
    1. Step 1: Press the B button and hold for 5 seconds under the PV power interface and the value is flashing.
    2. Step 2: Press the B button to clear the generated energy.



3. Switch the battery temperature unit

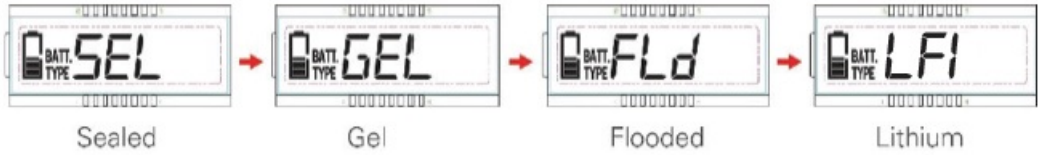
   Press the B button and hold 5s under the battery temperature interface.



    1. Battery type 1 Sealed Gel Flooded
    2. Set battery type by LCD.

Operation

1. Step 1: Press the “B” button and hold 5s under the battery voltage interface.
2. Step 2: Press the “A” button when the battery type interface is flashing.
3. Step 3: Press the “B” button to confirm the battery type.



Please use the LF1 profile for 12V applications and LF2 for 24V applications.

MOUNTING INSTRUCTIONS

Please note that the controller must be installed in a place with sufficient air flow through with a minimum clearance of 150 mm from the upper and lower edges.

1. Use the cutting template located in the full manual at gpelectric.com
2. Drill the holes in each corner based on the manual template
3. Nest the backplate in the hole in the wall
4. Secure the controller using the screw holes in the corners
5. Reattach the controller faceplate

For complete installation instructions use the complete manual at [gpelectric.com]

Nominal System Voltage	12/24V
Battery Input Voltage Range	8V～32V
Rated Charge Current	30A
Max. PV Short Circuit Current	30A
Max. PV Open Circuit Voltage	50A
Battery Settings	Sealed (AGM), Gel, Flooded, Lithium 1 (12V), and Lithium 2 (24V)
Dimensions	7.02 x 4.15 x 1.9in; 178.5×105.5×48.3mm
Weight	300g
Warranty	2 years

WARNINGS

	Disconnect all power sources	Electricity can be very dangerous. Installation should be performed only by a licensed electrician or qualified personnel.
	Battery and wiring safety	Observe all safety precautions of the battery manufacturer when handling or working around batteries. When charging, batteries produce hydrogen gas, which is highly explosive. Ensure batteries are in a well-ventilated space, away from sparks for open flames.
	Wiring connections	Ensure all connections are tight and secure. Loose connections may generate sparks and heat. Be sure to check connections one week after installation to ensure they are still tight.
	Work Safely	Wear protective eyewear and appropriate clothing during installation. Use extreme caution when working with electricity and when handling and working around batteries.
	Observe correct polarity	Reverse polarity of battery terminals will permanently damage the controller.
	Do NOT exceed the Solar Controller max current ratings	The maximum current of the solar system is the sum of the parallel-connected PV module-rated short circuit currents (Isc) multiplied by 1.25. The resulting system current is not to exceed 30A. If your solar system exceeds this value, contact your dealer for a suitable controller alternative.
	Do NOT exceed the Solar Controller max voltage ratings	The maximum voltage of the array is the sum of the PV module-rated open-circuit voltage of the series connected modules multiplied by 1.25 (or by a value from NEC 690.7 provided in Table 690.7 A). The resulting voltage is not to exceed 50V. If your solar system exceeds this value, contact your dealer for a suitable controller alternative.

Documents / Resources

	Go Power GP-PWM-30-FM-DL 30AMP Solar Controller [pdf] User Guide GP-PWM-30-FM-DL 30AMP Solar Controller, GP-PWM-30-FM-DL, GP-PWM-30-FM-DL Solar Controller, 30AMP Solar Controller, Solar Controller, 30AMP Controller, Controller