Designed and Made for Australian Conditions

Client : Zylux
Client Model No.: OC-SR30
Product Name : 12V 30A Solar Controller Panel with LCD
Type of Battery : 12V Gel, AGM, Conventional Calcium

Document Ref. No. : RDS-SC030PL-R4
Approved by : Troy
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1 Electrical Parameters

				Unit
1-1	Normal input solar cell array voltage :	17 to 22		Vdc
1-2	Peak solar cell array voltage	25		Vdc
1-3	Maximum Current Consumption when connected 15V Array (battery not present) :	35		mAdc
1-4	Maximum Current Consumption when connected 13V battery (Array not present) :	25		mAdc

2 Output Control & metering Characteristics

2-1 **Charging Meth Level 1 ⟶ Level 2 ⟶Level 3**

2-2 **Minimum Charging Condition for startup :**

	2-2-1 Correct Polarity at input and output;			
	2-2-2 Charging start when Battery voltage not less than	***5.0***	***+/- 0.3***	***Vdc***
	2-2-3 Minimum Solar cell array voltage	***13.0***	***+/- 0.3***	***Vdc***
	2-2-4 Solar cell array voltage is higher than battery voltage	***1.0***	***+/- 0.3***	***Vdc***
2-3	Maximum Charging Current at Level 1 period	30.0	+/- 1	Adc
2-4	Maximum charging voltage at Level 2 Period (for GEL Battery)	14.4	+/- 0.4	Vdc
2-5	Maximum charging voltage at Level 2 Period (for LEAD-ACID Battery)	14.7	+/- 0.4	Vdc
2-6	Level 1 to Level 2 Period when charging voltage reach (for GEL Battery)	14.1	+/- 0.4	Vdc
2-7	Level 1 to Level 2 Period when charging voltage reach (for Lead-Acid Battery)	14.5	+/- 0.4	Vdc
2-8	Level 2 to Level 3 Period when charging current reach (for GEL Battery)	4.0	+/- 1	Adc
2-9	Level 2 to Level 3 Period when charging current reach (for Lead-Acid Battery)	4.0	+/- 1	Adc
2-10	Maximum charging voltage at Level 3 Period	13.8	+/- 0.4	Vdc
2-11	LCD Meter Accuracy at DC Voltage	1.25		%
2-12	LCD Meter Accuracy at DC Current at 5 ~30Amp	3		%

Remark: 1) From item 2-3 to 2-10,the voltage and current are measured at output terminal side.
2) LCD readings are measured from output terminal of the solar controller.

3 Protection

3-1	Over temperature protection active at above	80	*C
3-2	The charger will resume the charging at about	65	*C

4 LED & LCD Indication

LED Indication

		Upper LED Colour	Solar Power RED	Charging BLUE	Float GREEN
	At Normal Status :				
4-1-1	Solar Power Present, Battery not present		ON	OFF	OFF
4-1-2	Solar Power Weak		ON	Flash	OFF
4-1-3	Charging at Level 1 Period		ON	ON	OFF
4-1-4	Charging at Level 2 Period		ON	ON	OFF
4-1-5	Float at Level 3 Period		ON	OFF	ON

		Lower LED Colour	GOOD GREEN	FAIR YELLOW	POOR RED
4-2-1	Battery Voltage below 11.5V +/- 0.4V		OFF	OFF	ON
4-2-2	Battery Voltage in between 11.5V and 12.5V +/-0.4V		OFF	ON	OFF
4-2-3	Battery Voltage above 12.5V +/- 0.4V		ON	OFF	OFF
4-2-4	Output terminal open circuit ,short circuit and Reverse Polarity		OFF	OFF	Flash

LCD meter Indication

4-3-1 Upper mode switc Battery Current mode (Display Pattern : xx.x)
4-3-2 Middle mode swit OFF LCD (N.C. for sample)
4-3-3 Lower mode switc Battery Voltage mode (Display Pattern : xx.x)

6 Physical Parameters &Electrical Parts

6-1	Panel material :	Thickness 2.5mm ABS Plastic
6-2	Panel Dimension :	180 (W) x 104 (L) mm
6-3	Overall Height :	approx. 45 mm
6-4	Net weight :	approx. 350g
6-5	Input and output Terminal specifications :	M5 Copper terminal

Remark : The input and output terminal wire should be used 6mm2 size core or above;
otherwise the voltage difference between output terminal and battery terminal are about 1Vdc.

8 Environmental Characteristics

8-1	Operating temperature :	-5 to 50 °C
8-2	Storage temperature :	-10 to 70 °C
8-3	Operating Humidility range :	0 to 80% RH

9 Charging Curve (Voltage)