



Client : Zylux  
 Client Model No.: OC-SR10  
 Product Name : 12V 10A Solar Controller Panel with LCD  
 Type of Battery : 12V Gel, AGM, Conventional Calcium

Document Ref. No. RDS-SR010  
 Approved By: Troy  
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 Revision : 1.0

1 Electrical Parameters				Unit
1-1	Normal input solar cell array voltage :	16.5	Typ.	Vdc
1-2	Max. solar cell array voltage ( when output no load )	23	Max.	Vdc
1-3	Current Consumption when connected 15V Array ( battery not present ) :	30	Max.	mAdc
1-4	Current Consumption when connected 12V battery ( Array not present ) :	15	Max.	mAdc

2 Output Control & metering Characteristics				
2-1 Normal Start up Charging Condition :				
2-1-1	Charging start when Battery voltage not less than	5.0	+/- 1	Vdc
2-1-2	Input solar cell array voltage	16.5	Typ.	Vdc
2-2 Charging current (continuous) :				
2-3	Charging current (Peak), Max ( 30 seconds )	12		Adc
2-4	Level 1 Cut-out Control Voltage:( for GEL Battery)	14.5	+/- 0.3	Vdc
2-5	Level 1 Cut-out Control Voltage: (for AGM/Flooded Battery)	14.7	+/- 0.3	Vdc
2-6	Level 2 Cut-in Control Voltage:( for GEL Battery)	13.6	+/- 0.3	Vdc
2-7	Level 2 Cut-in Control Voltage:(for AGM/Flooded Battery)	13.8	+/- 0.3	Vdc
2-8	Minimum LCD Display Voltage *	6.0	+/- 0.3	Vdc
2-9	Maximum LCD Display Voltage *	19.0	+/- 0.3	Vdc

Note : \* The voltage range may be out of these ranges when input current is different.

3 Protection		
3-1-1	Over temperature protection active at above #	85 °C
3-1-2	The charger will resume the charging at about	75 °C
3-2	Battery Reversed Protection	

Note : # When over temperature protection is activated, the Yellow LED will be "OFF".

4 LED Indication		LED Indication	Solar Power	Charging	Float
4-1	LED Indication				
		Colour	RED	Yellow	Green
4-2	Solar Power Present, Battery not present		ON	OFF	OFF
4-3	Bulk Charging mode		ON	ON	OFF
4-5	Float Mode/Maintaining Mode		ON	OFF	ON
4-6	Battery Reversed		ON	OFF	OFF

5 Electrical Parts	
5-1	Input Lead (Array ) specifications : SPT-1 18AWG x 2C 105°C, External length : 915mm
5-2	Output Lead (Battery ) specifications : SPT-1 18AWG x 2C 105°C with two terminal,External length : 915mm (10mm ring terminal for positive, 8mm ring terminal for negative)

6 Physical Parameters	
6-1	Panel material : Plastic, ordinary ABS
6-2	Panel Dimension : 120 (W) x 75 (L)
6-3	Overall Height : approx. 25 mm
6-4	Net weight : approx. 200g

7 Environmental Characteristics	
7-1	Operating temperature : -5 to 45 °C
7-2	Storage temperature : -10 to 70 °C
7-3	Operating Humidity range : 0 to 80% RH

### 8 Charging Curve (Voltage)

