

**RED-60A-280C-xL**  
**RED-80A-280C-xL**



## SPS MPPT MULTI STAGE INTELLIGENT CHARGING TECHNOLOGY



- ☛ SPS MPPT solar charge controller Converts your normal/ existing inverter into a solar inverter.
- ☛ It is extremely reliable & has a long operational life.
- ☛ It can be used with a 48V / 72V / 96V / 120V / 144V battery bank.
- ☛ It has a smart sensing feature and will auto detect the battery voltage on connecting to a battery bank or can override this feature via settings probe.
- ☛ It has many advanced protection features like high charging current, high charging voltage, solar reverse polarity protection, reverse current flow protection from battery to solar panels and over temperature protection.
- ☛ The default parameters of this MPPT charge controller can be easily adjusted with given settings probe for the usage of Tubular /Lithium/Smf batteries.
- ☛ The unique 'Idle mode' in this Mppt maintain the battery at bit lower voltage (idle float) during no usage days & there by avoiding the water loss and keep the battery healthy for longer period of time.



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### TECHNICAL INFORMATION RED-60A-280C-xL, 80A-280C-xL



General					
Nominal System Voltage	48V DC	72V DC	96V DC	120V DC	144V DC
Battery Select	Auto Select / Manual Select (Default : Auto Select)				
Battery Type	Tubular / SMF / Lithium (Default : Tubular)				
Battery Charging Modes	Multi Stage (Bulk / Absorption / Float / Idle)				
Solar Charger Type	MPPT				
Model RED-60A-280C-xL					
Solar panel (Max.)	3000W	4000W	5000W	6000W	7000W
Max. Solar input Voltage(Voc)	60 - 200V	90 - 200V	120 - 250V	150 - 280V	180 - 280V
Output Current Max.	60A (Adj 10 - 60Amps)				
Weight	6.1Kg				
Dimension (L x W x H) mm	130 x 220 x 420				
Efficiency	>98.9%				
Model RED-80A-280C-xL					
Solar panel (Max.)	4500W	6000W	7500W	9000W	11000W
Max. Solar input Voltage(Voc)	60 - 200V	90 - 200V	120 - 250V	150 - 280V	180 - 280V
Output Current Max.	80A (Adj 10 - 80Amps)				
Weight	8.8Kg				
Dimension (L x W x H) mm	140 x 290 x 540				
Efficiency	>98.9%				
Battery Parameters Default, (Adjustable)					
Bulk	59.2V, (48 - 68V)	88.8V, (72 - 102V)	118.4V, (96 - 136V)	148.0V, (120 - 170V)	177.6V, (144 - 204V)
Float	57.6V, (48 - 68V)	86.4V, (72 - 102V)	115.2V, (96 - 136V)	144.0V (120 - 170V)	172.8V (144 - 204V)
Idle	56.0V, (48 - 68V)	84.0V, (72 - 102V)	112.0V, (96 - 136V)	140.0V (120 - 170V)	168.0V (144 - 204V)
Idle Opt	50.0V, (48 - 68V)	75.0V, (72 - 102V)	100.0V, (96 - 136V)	125.0V (120 - 170V)	150.0V (144 - 204V)
Equalization	60.8V, (48 - 68V)	91.2V, (72 - 102V)	121.6V, (96 - 136V)	152.0V (120 - 170V)	182.4V (144 - 204V)
Relay on	56.0V, (40 - 68V)	84.0V, (60 - 102V)	112.0V, (80 - 136V)	140.0V (100 - 170V)	168.0V (120 - 170V)
Relay off	46.0V, (40 - 68V)	69.0V, (60 - 102V)	92.0V, (80 - 136V)	115.0V (100 - 170V)	138.0V (120 - 170V)
*Equalization	Default : Off (On / Off)				
Equalization Time	Default : 120 Minute (10 - 600 Minute)				
Absorption Time	Default : 10 Minute (10 - 600 Minute)				
Display Parameters					
LCD Type	RED- xxA - xxxC - 1L = Single Line		RED - xxA - xxxC - 4L = Four Line		
LCD Display Parameters	Battery Volt , Charging Current , Solar Volt , Solar Input Current , Solar Peak Watts , Charging Mode Daily Unit , Total Unit , Solar Output Watts , Charging Modes , Absorption Time , Temperature				
LED Indication	Solar Present , Solar Charging , Excess , Relay , Bulk , Absorption , Float , Idle				
Protections					
Protections	SPV Over Current , Battery Over Current , SPV Reverse Current SPV Reverse Polarity , Over Temperature, Battery Over Volt				
Cooling	Temp Controlled, Fan				
Cooling Fan	Fan On > 70°C		Fan Off < 60°C		
Fixing	Wall Mounted				

\*Battery equalization process is advised to use under the supervision of technician only.  
 \*Specification are subject to change without prior notice due to constant improvement in design & technology.