

## MPPT Solar Charge Controller eSmart2 Series 12V/24V/48Vdc 20amp-40amp

### Key Features

Advanced MPPT control algorithm, MPPT efficiency ≥99.5%, Machine conversion efficiency up to 96%;  
 DC12V/24V/36V/48V battery system automatic recognition, user can use it in different system conveniently ;  
 Maximum PV input voltage up to DC100V ;  
 3-Stage charge: (constant current, constant voltage, floating charge), to extend the battery life ;  
 Discharge mode: ON/OFF mode, PV voltage control mode.  
 Users can choose 4 kinds of commonly standard batteries(Sealed lead acid,Vented, Gel, NiCd). Other kinds of batteries can be defined by users ;  
 Most information could be provide by LCD like: model No., PV input voltage, battery type, battery voltage, charging current, charging power, working status and so on.Also customer's information like company name, website and logo can be added into Solar Eagle software.  
 RS232 communication, we can offer communication protocol also, it's convenient for user's integration management.  
 CE,ROHS,FCC certifications approved.We can help clients to approve other certifications.  
 2 years warranty, and 3-10 years extended warranty service also can be provided.



### Technical Specification

<b>eSMART2-12V/24V/36V/48V-series</b>		20A	30A	40A
Charge Mode	MPPT (Maximum Power Point Tracking)			
MPPT Efficiency	96.5% ~99.5%			
System Type	DC12V/24V/36V/48V	Automatic recognition		
<b>Input Characteristic</b>				
PV Max. voltage (VOC)	12V/24V/36V/48V system	DC100V		
Start the charging Voltage point	12V/24V/36V/48V system	Higher than Battery voltage 4V		
Low Input Voltage Protection Point	12V/24V/36V/48V system	Higher than Battery present voltage 1V		
High Input voltage Protection Point	12V/24V/36V/48V system	DC-100V		
Rated PV power	12V system	260W	390W	520W
	24V system	520W	780W	1040W
	36V system	780W	1170W	1560W
	48V system	1040W	1560W	2080W
<b>Charge Characteristic</b>				
Charge Mode	MPPT (Maximum Power Point Tracking)			
Charge Method	3-Stage: constant current(fast charging) - constant voltage-floating charge			
Selectable Battery Types (Default type is Gel battery)	12V/24V/36V/48V system	Sealed lead acid, Vented, Gel, NiCd battery (Other types of the batteries also can be defined)		
Rated charge current	12V/24V/36V/48V system	20A	30A	40A
	<b>Output Discharge Characteristic</b>			
Output voltage	Based on battery voltage			
Rated Output Current	40A			
The output control	On mode, Off mode, PV voltage control mode			
<b>Display/Communication</b>				
LCD display/PC upper (RS232)	System type, PV voltage-charge voltage, charging current, charging power, temperature etc.			
<b>Other Parameters</b>				
Protect function	Yes			
Thermal methods	fan cooling			
Products Size D*W*H(mm)	240*168*66			
Packing Size D*W*H(mm)	289*204*101			
Net Weight (kg)	2.3			
Gross Weight (kg)	2.8			
Type of Mechanical Protection	IP25			

\*Specifications are subject to change without prior notice