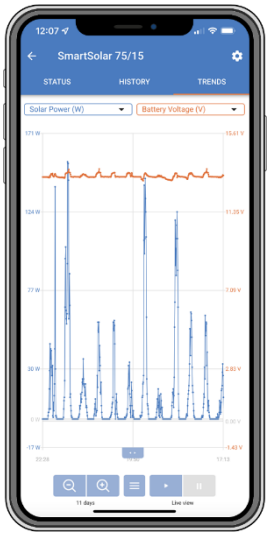
SmartSolar Charge Controller	150/45	150/60	150/70
Battery voltage	12 / 24 / 48 V Auto Select (software tool needed to select 36 V)		
Rated charge current	45 A	60 A	70 A
Nominal PV power, 12 V 1a,b)	650 W	860 W	1000 W
Nominal PV power, 24 V 1a,b)	1300 W	1720 W	2000 W
Nominal PV power, 36 V 1a,b)	1950 W	2580 W	3000 W
Nominal PV power, 48 V 1a,b)	2600 W	3440 W	4000 W
Max. PV short circuit current 2)	50 A (max 30 A per MC4 conn.)		
Maximum PV open circuit voltage	150 V absolute maximum coldest conditions 145 V start-up and operating maximum		
Maximum efficiency	98 %		
Self-consumption	Less than 35mA @ 12 V / 20mA @ 48 V		
Charge voltage 'absorption'	Default setting: 14,4 / 28,8 / 43,2 / 57,6 V (adjustable with: rotary switch, display, VE.Direct or Bluetooth)		
Charge voltage 'float'	Default setting: 13,8 / 27,6 / 41,4 / 55,2 V (adjustable: rotary switch, display, VE.Direct or Bluetooth)		
Charge voltage 'equalization'	Default setting: 16,2 V / 32,4 V / 48,6 V / 64,8 V (adjustable)		
Charge algorithm	multi-stage adaptive (eight pre-programmed algorithms) or user defined algorithm		
Temperature compensation	-16 mV / -32 mV / -64 mV / °C		
Protection	PV reverse polarity / Output short circuit / Over temperature		
Operating temperature	-30 to +60 °C (full rated output up to 40 °C)		
Humidity	95 %, non-condensing		
Maximum altitude	5000m (full rated output up to 2000m)		
Environmental condition	Indoor, unconditioned		
Pollution degree	PD3		
Data communication port	VE.Direct or Bluetooth		
Remote on/off	Yes (2 pole connector)		
Programmable relay	DPST AC rating: 240 VAC / 4 A DC rating: 4 A up to 35 VDC, 1 A up to 60 VDC		
Parallel operation	Yes: up to 10 units can be synchronized with Bluetooth		
ENCLOSURE			
Colour	Blue (RAL 5012)		
PV terminals 3)	35 mm² / AWG2 (Tr models) Two pairs of MC4 connectors (MC4 models)		
Battery terminals	35 mm² / AWG2		
Protection category	IP43 (electronic components), IP22 (connection area)		
Weight	3 kg		
Dimensions (h x w x d)	Tr models: 185 x 250 x 95 mm MC4 models: 215 x 250 x 95 mm		
STANDARDS			
Safety	EN/IEC 62109-1, UL 1741, CSA C22.2		
STORED TRENDS			
Data stored	Battery voltage, current and temperature, as well as load output current, PV voltage and PV current.		
Number of days trends data is stored	46		

1a) If more PV power is connected, the controller will limit input power.
1b) The PV voltage must exceed Vbat + 5 V for the controller to start. Thereafter the minimum PV voltage is Vbat + 1 V.
2) A PV array with a higher short circuit current may damage the controller.
3) MC4 models: several splitter pairs may be needed to parallel the strings of solar panels
Maximum current per MC4 connector: 30 A (the MC4 connectors are parallel connected to one MPPT tracker)



Victron Energy B.V. | De Paal 35 | 1351 JG Almere | The Netherlands
E-mail: sales@victronenergy.com | **www.victronenergy.com**