Blue Smart Charger

IP65

The professional's choice



5 YEAR WARRANTY

- Water, dust and chemical resistant
- Seven step smart charge algorithm
- Recovery of fully discharged 'dead' batteries
- Automatic power supply function
- Severe cold performance: down to -30°C
- Several other battery life enhancing features
- Low power mode to charge smaller batteries
- ***Li-ion*** battery mode
- Setup and configure, readout of voltage and current by ***Bluetooth Smart***

Bluetooth® SMART

Blue Smart IP65 Charger

Included



Clamps

M8 eyelets

Blue Smart IP65 Charger	6 V/12 V - 1.1 A	12 V 4/5/7/10/15/25 A	24 V 5/8/13 A
Input voltage and frequency range	100 - 250VAC | 45 - 65Hz	230 VAC	
Efficiency	82%	94%	95%
Standby power consumption	<0,5 W	0,5 W	
Minimum battery voltage	Starts charging from down to 0 V		
Charge voltage 'absorption'	Normal: 7,2 V | 14,4 V High: 7,35 V | 14,7 V Li-ion: 7,1 V | 14,2 V	Normal: 14,4 V High: 14,7 V Li-ion: 14,2 V	Normal: 28,8 V High: 29,4 V Li-ion: 28,4 V
Charge voltage 'float'	Normal: 6,9 V | 13,8 V High: 6,9 V | 13,8 V Li-ion: Disabled	Normal: 13,8 V High: 13,8 V Li-ion: 13,5 V	Normal: 27,6 V High: 27,6 V Li-ion: 27,0 V
Charge voltage 'storage'	Normal: 6,6 V | 13,2 V High: 6,6 V | 13,2 V Li-ion: 6,75 V | 13,5 V	Normal: 13,2 V High: 13,2 V Li-ion: 13,5 V	Normal: 26,4 V High: 26,4 V Li-ion: 27,0 V
Charge current	1.1 A	4 / 5 / 7 / 10 / 15 / 25 A	5 / 8 / 13 A
Low current mode	0,5A	2 / 2 / 2 / 3 / 4 / 10 A	2 / 3 / 4 A
Temperature compensation (lead-acid batteries only)	8 mV/°C | 16 mV/°C	16 mV/°C	32 mV/°C
Power supply mode	Yes		
Back current drain	0,1 Ah/month (140uA)	0,7 Ah/month (1 mA)	
Protection	Reverse polarity, Output short circuit, Over temperature		
Operating temp. range	-30 to +50°C (full rated output up to 30°C)	-40 to +60°C (full rated output up to 30°C) (cables retain flexibility at low temperature)	
Humidity (non-condensing)	Max 95%		
Charge algorithm	7-stage adaptive		
Bluetooth	-4dBm, 2402 – 2480 MHz		
ENCLOSURE			
Battery-connection	Black and red cable of 1,5 meter		
230V AC-connection	1.5m cable with CEE 7/16 or AS/NZS 3112 plug	Cable of 1,5 meter with CE 7/16, CE 7/17, BS 1363 plug (UK) or AS/NZS 3112 plug	
Protection category	IP65 (splash and dust proof)		
Weight	0,4 kg	IP65 12 V 25 A 24 V 13 A: 1,9 kg Other: 0,9 kg	
Dimensions (h x w x d)	38 x 64 x 153 mm	IP65s 12 V 4/5 A : 45 x 81 x 182 mm IP65 12 V 7 A 24 V 5 A: 47 x 95 x 190 mm IP65 12 V 10/15 A 24 V 8 A: 60 x 105 x 190 mm IP65 12 V 25 A 24 V 13 A: 75 x 140 x 240 mm	
STANDARDS			
Safety	EN 60335-1, EN 60335-2-29		
Emission	EN 55014-1, EN 61000-6-3, EN 61000-3-2		
Immunity	EN 55014-2,EN 61000-6-1, EN 61000-6-2, EN 61000-3-3		

www.victronenergy.com
Customer support: sales@victronenergy.com

Carry Case for Blue Smart IP65 Chargers and accessories





Wall mount



Rubber Bumper

Optional



Fused clamps



Fused M6 or M8 eyelets



Extension cable 2m



Autoplug



MagCode Power Clip 12V



Battery indicator panel



Battery indicator eyelet M8

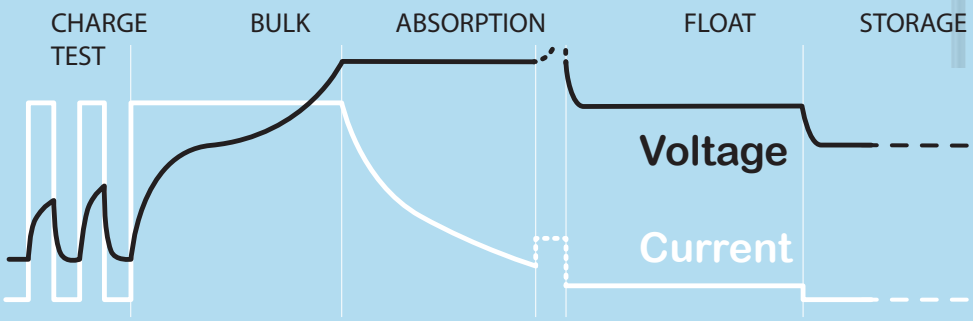
IP65 - Charger **Guide**

	6/12V			12V			24V		
	1.1 A	4 & 5 A	7 A	10 A	15 A	25 A	5 A	8 A	13 A
Battery size Ah	*20 - 50 Ah*	*20 - 50 Ah*	*20 - 70 Ah*	*30 - 100 Ah*	*50 - 150 Ah*	*80 – 250Ah*	*20 - 50 Ah*	*30 - 80 Ah*	*50 – 130Ah*
Your IP65 Charger »	**6/12-1.1**	**12/4 & 5**	**12/7**	**12/10**	**12/15**	**12/25**	**24/5**	**24/8**	**24/13**
	●	●	●	●	●				
	●	●	●	●	●				
CLASSIC	●	●	●	●	●	●			
MODERN	●	●	●	●	●	●			
	●	●	●	●	●	●	●	●	●
							●	●	●
	●	●	●	●	●	●	●	●	●

Recommended
This is the best charger for this type of battery. The battery will be charged in the most efficient way.

OK
This charger can be used for this battery. It is possible that it takes longer to charge the battery than using a recommended charger.





Ultra high efficiency 'green' battery charger

With up to 95% efficiency, these chargers generate up to four times less heat when compared to the industry standard. And once the battery is fully charged, power consumption reduces to 0,5 Watt, some five to ten times better than the industry standard.

Durable, safe and silent

- Low thermal stress on the electronic components.
- Protection against ingress of dust, water and chemicals.
- Protection against overheating: the output current will reduce as temperature increases up to 60°C, but the charger will not fail.
- The chargers are totally silent: no cooling fan or any other moving parts.

Reconditioning

A lead-acid battery that has been insufficiently charged or has been left discharged during days or weeks will deteriorate due to sulfation. If caught in time, sulfation can sometimes be partially reversed by charging the battery with low current up to a higher voltage.

Recovery function for fully discharged batteries

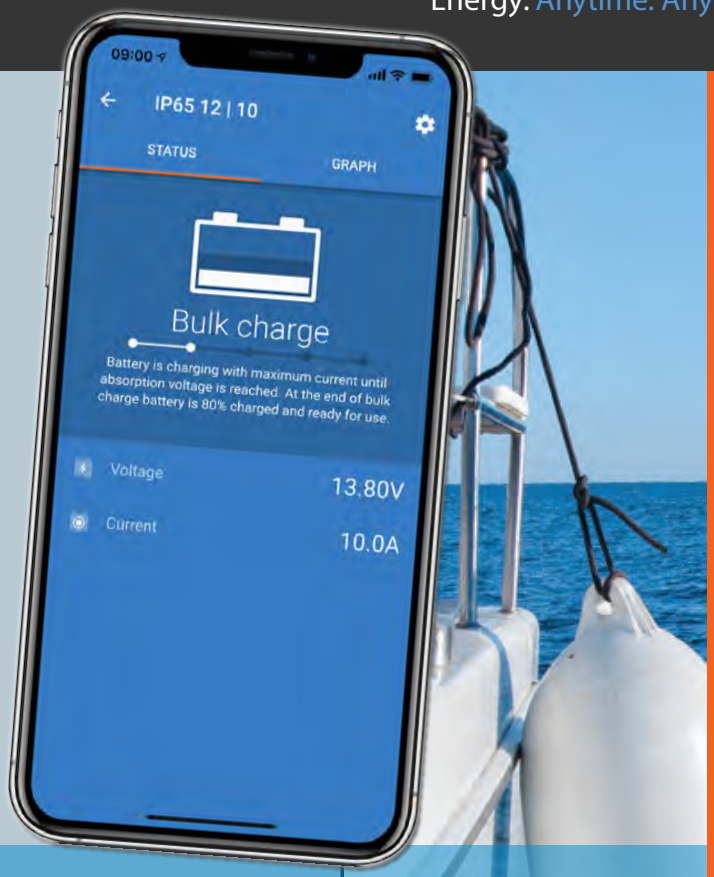
Most reverse polarity protected chargers will not recognize, and therefore not recharge a battery which has been discharged to zero or nearly zero Volts. The ***Blue Smart IP65 Charger*** however will attempt to recharge a fully discharged battery with low current and resume normal charging once sufficient voltage has developed across the battery terminals.

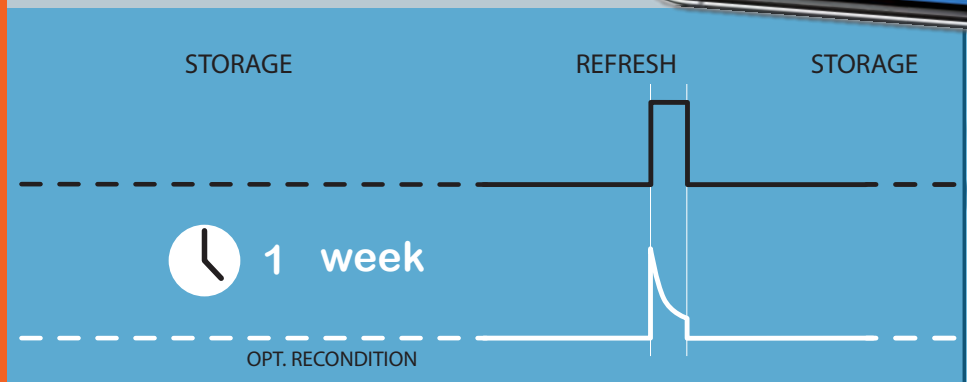
The VictronConnect app

Setup, readout and configure your ***Blue Smart IP65 Charger*** via your smartphone.

You can display the status of your charger and battery and even control the functions of your charger using the VictronConnect app. On your screen the readout of voltage and current is default available.

Download your app for iOS and Android:





Storage mode: less corrosion of the positive plates

Even the lower float charge voltage that follows the absorption period will cause grid corrosion. It is therefore essential to reduce the charge voltage even further when the battery remains connected to the charger during more than 48 hours.

Temperature compensated charging

The optimal charge voltage of a lead-acid battery varies inversely with temperature. The ***Blue Smart IP65 Charger*** measures ambient temperature during the test phase and compensates for temperature during the charge process. The temperature is measured again when the charger is in low current mode during float or storage. Special settings for a cold or hot environment are therefore not needed.

Li-ion battery mode

The ***Blue Smart IP65 Charger*** uses a specific charging algorithm for Li-ion ($LiFePO_4$) batteries, with automatic Li-ion under voltage protection reset.

