



Power Sports Charger - 6V/12V 1.1A Output

Model No: VECIP65-6-12/1.1 Part No: BPC120134014R

1. What are the benefits of the Blue Smart IP65 charger range?

The Blue Smart IP65 range of battery chargers are Bluetooth enabled to provide full control in the palm of your hand.

To operate the Power Sports charger, simply download the VictronConnect App, to access the control/configure functions and view live status and charger history information.

The Blue Smart IP65 range provides a professional charging solution for most applications, featuring:

- Water, dust and chemical resistance.
- Seven step smart charge algorithm.
- Recovery of fully discharged "dead" batteries.
- Automatic power supply function.
- Battery life enhancing features.
- Lilon* battery mode (LiFePO4).
- Low power mode for smaller batteries.
- Severe cold performance: down to -30°C .
- Setup and configure, readout of voltage and current by Bluetooth Smart.



**Please note: Here, Lilon means Lithium Iron Phosphate (LiFePO4) not Lithium Ion. These are different chemistries.*

2. How do I operate the charger?

The Blue Smart charger requires the VictronConnect App be installed on a suitable smart device and linked via Bluetooth. Once installed, the Blue Smart charger can be configured via the settings menu. To turn on, simply plug the world voltage power plug into a wall socket and attach the appropriate connection to the battery terminals.

3. Do I need to manually select 6V or 12V?

No, the diagnostic processes within the Blue Smart charger identifies the battery voltage and selects the appropriate charge profile. If using the charger on multiple batteries, unplug from the power point to reset before connecting to a new battery.

4. How do I select battery chemistry?

The Blue Smart charger default setting is for Lead Acid batteries. This means the Blue Smart charger can be used on 6 or 12 volt Lead Acid batteries without changing settings. When charging Lithium batteries, this setting must be changed in the VictronConnect App. As the charger remembers the last used setting, any changes need to be manually made before connecting to a new battery.

5. Should I reset my charger when re-attaching my battery?

It's always recommended to reset the Blue Smart charger when attaching a battery. However, as the charger remembers the previous setting, you can reattach the same battery without needing to reset.

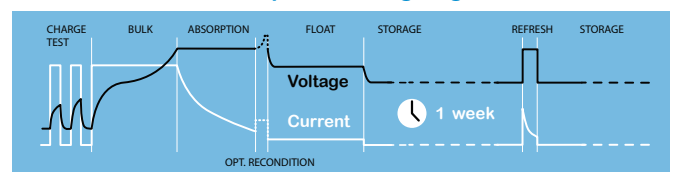
6. What does an IP65 rating mean?

An IP65 rating is its Ingress Protection level.

The first number **6** (being the highest level) relates to its intrusion protection level against the ingress of dust and solids. Level 6 is totally dust tight, it provides full protection against dust and other particulates, including a vacuum seal, tested against continuous airflow for up to 8 hours.

The second number **5** relates to moisture protection on a rating of 0 to 9. It provides protection against water projected by a 6.3mm nozzle against the enclosure from any direction with no harmful effects.

7. What is the Seven Step smart charge algorithm?



The seven steps - Test, Bulk, Absorption, Recondition, Float, Storage, Refresh. The charger will automatically assess if each step is required to ensure maximum battery life.

8. Why do I need the Bluetooth function?

The Blue Smart Power Sports charger requires a Bluetooth connection with a smart device to operate - the charger will only work with 6V or 12V Lead Acid batteries @ 1.1A current without this. Bluetooth not only provides the ability to change settings, but provides real time battery status and historical information.



9. What can I do with the VictronConnect app?

Many useful features are available including:

- Setup and configure from 5 different charging presets.
- Adjust the charge current from 2 preset amperages - Standard and Low Power Mode.
- View live charge status, battery voltage and battery current.
- View the Last 40 charge cycles.
- Reset to factory defaults.
- Expert mode allows users to configure the charger to specific battery manufacturer specifications.
- Update firmware for up-to-date settings and features.
- Add new features when they become available.



10. Is the Blue Smart charger range safe?

Yes, Blue Smart chargers feature protections against reverse polarity, short circuit and over temperature to ensure safe use.

Once connected to a battery, the charger immediately detects voltage and polarity. If the battery is connected incorrectly, all status LEDs will start blinking. No sparks will occur.



11. Can I leave the Blue Smart charger connected to my battery for long periods of time?

Yes, Blue Smart chargers are designed to charge then maintain batteries – safe for long term connection. This is applicable for any chemistry, even LiFePO4.

Storage mode will refresh every 7 days to ensure the battery is being kept at optimum levels. The History file will show the last 40 cycles.

12. The Blue Smart charger has 4 mode options for charging Lead Acid batteries?

You should use each mode:

- **Normal** is @ 14.4V and recommended for Flooded, AGM, Gel & Starter batteries.
- **Normal + Recondition** – The recondition current is 8% of the charger's current rating and voltage can be up to 2V (16.4V) higher than the nominated (14.4V) absorption voltage.
- **High** is @ 14.7V and recommended for Calcium batteries.
- **High + Recondition** – The recondition current is 8% of the charger's current rating and voltage can be up to 2V (16.7V) higher than the nominated (14.7V) absorption voltage.

13. What is the Dead Battery Recovery function?

The Blue Smart IP65 charger will attempt to recharge a fully discharged battery with low current and resume normal charging once there is sufficient voltage across the battery terminals. This can also be used to WAKE UP Lithium Iron Phosphate (LiFePO4) batteries that have tripped the BMS board Under Voltage Protection (UVP).

14. What is the Power Supply function?

The charger will supply DC loads when no battery is connected. It can be used as a power supply (**at 1.1A or 500mA**) to low DC loads like caravan fridges, lights, etc.

15. What is Low Power Mode?

Blue Smart IP65 chargers have the ability to have the output current reduced (usually by half), to charge lower capacity or smaller batteries. Setting can be changed between 1.1A and 500mA via the VictronConnect app.

16. What is Recondition Mode?

A lead acid battery that has been insufficiently charged or has been left discharged for days or weeks will deteriorate due to sulphation. If detected in time, sulphation can sometimes be partially reversed by charging the battery with low current up to a higher voltage. The recondition current is 8% of the charger's current rating and voltage can be up to 2V higher than the nominated absorption voltage. No load can be on the battery while in recondition mode.

17. What is Refresh Mode?

Slow self-discharge is prevented by an automatic weekly refresh of the battery with a short absorption charge.

18. What is temperature compensation?

The Blue Smart IP65 charger measures ambient temperature during the test phase and compensates for increased temperature during the charge process to maintain high efficiency. The temperature is measured again when the charger is in low current mode during float or storage.

19. What is Adaptive Battery Management?

Within the 7 step charge algorithm there are 3 critical steps for lead acid batteries: [1] bulk or constant-current charge, [2] absorption or topping charge and [3] float charge. Several hours of absorption charge is needed to fully charge the battery and prevent early failure to sulphation.

The relatively high voltage during absorption does however accelerate aging due to grid corrosion on the positive plates. Adaptive Battery Management limits corrosion by reducing absorption time when possible – that is when charging a battery that is already (nearly) fully charged.

20. How long is the warranty?

All Victron Energy chargers come with a 5 Year Warranty.

21. What optional accessories are compatible with the Blue Smart IP65 charger range?



The Victron proprietary cable connection allows for seamless interchangeability with other Victron accessory cables. There are currently the following accessory cables available:

- Alligator clips with 30A auto blade fuse (*VECIP65-CLAMP*)
- M6 eyelets with 30A auto blade fuse (*VECIP65-M6*)
- M8 eyelets with 30A auto blade fuse (*VECIP65-M8*)
- Battery indicator eyelet to M8 eyelet connector with 30A auto blade fuse - SLA only (*VECIP65-BIE*)
- Battery indicator panel to M8 eyelet connector with 30A auto blade fuse - SLA only (*VECIP65-BIP*)
- XLR 3-pin connector (16A rated) with 30A auto blade fuse (*VECIP65-XLR*)
- PP30 Anderson style red/black connector (*VECIP65-APP30*)
- SB50 Anderson style connector - 15A max (*VECIP65-ASB50*)
- 2 metre extension cable (*VECIP65-EXT*)

Plus protective accessories:

- Hard carry case for charger + accessories (*charger & accessories not included*)

