



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. Simply by downloading the VictronConnect app, you can check the status of your charger and the connected battery through a smartphone or tablet, and configure all the settings of the charger.

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

- Water, dust and chemical resistance.
- Seven step smart charge algorithm.
- Ultra high efficiency - up to 95%.
- 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. 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.

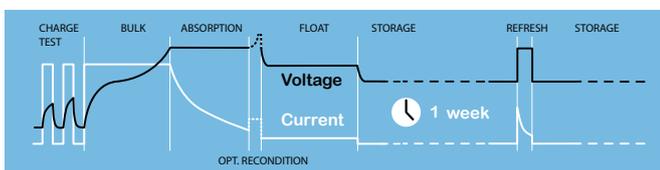
The second number **5** relates to moisture protection on a rating of 0 to 9. It provides protection against water projected by a 6.3mm nozzle against the enclosure from any direction with no harmful effects.

3. What does "up to 95% efficiency" mean?

This means that the charger will convert up to 95% of the input power into charging power. Less efficient chargers lose much of their efficiency through heat. The Blue Smart charger range operates at a much lower temperature as a result – much lower than most other chargers on the market.

4. 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.



5. Why do I need the Bluetooth function?



Bluetooth allows you to remotely monitor (within a 10 metre range) the charge progress of the battery in real time and make any necessary changes to the settings without touching the charger, which is particularly useful if the charger is inaccessible.

The VictronConnect app is a free download available from your app store and is available for Android and Apple devices. At initial setup, the password is 000000 (six zeroes).

6. 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.
- Turn off Bluetooth.
- Reset to factory defaults.
- Update firmware to ensure up-to-date settings and features.
- Add new features when they become available (advanced settings coming soon).



7. Do I need to use Bluetooth and the app to operate the battery charger?

No. All functions can be activated by the MODE button on the charger face. Bluetooth can be turned off via the VictronConnect app. To turn Bluetooth back on, switch the charger off then on again to reset. The included instruction manual provides the process.

8. Is the Blue Smart charger range safe?

Yes, all Blue Smart chargers are equipped with 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.

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

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

10. 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.

11. Can the Blue Smart charger range charge Lithium batteries?

The Blue Smart charger range has charge modes for both Lead Acid and Lithium (LiFePO4) batteries. Charge mode can be selected via the VictronConnect app, or by using the MODE button on the charger.

12. 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).

13. 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 to low DC loads like caravan fridges, lights, etc.

14. What is Low Power Mode?

All Blue Smart IP65 chargers have the ability to have the output current reduced (usually by half), to charge lower capacity or smaller batteries. Settings are easily configured in the VictronConnect app, or by holding the MODE button on the charger for 3 seconds.

15. 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.

16. What is Refresh Mode?

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

17. 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.

18. 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.

19. How long is the warranty?

All Victron Energy charger products come with a 5 Year Warranty.

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

There are currently 10 accessory cables to choose from:



- Alligator clips with 30A auto blade fuse
- M6 eyelet connector with 30A auto blade fuse
- M8 eyelet connector with 30A auto blade fuse
- 2 metre extension cable
- 12V cigarette plug with 16A auto fuse
- PP30 Anderson style red/black connector
- SB50 Anderson style connector (15A max)
- XLR 3-pin connector with 30A auto blade fuse
- Battery indicator eyelet to M8 eyelet connector with 30A auto blade fuse
- Battery indicator panel to M8 eyelet connector with 30A auto blade fuse

Plus protective accessories:

- Rubber bumper for 12/10, 12/15 and 24/8 models
- Wall mount for 12/10, 12/15 and 24/8 models
- Hard carry case for charger + accessories (charger & accessories not included)

