

Lynx Smart BMS

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Lynx Smart BMS



Lynx Smart front angle



RJ45 VE.Can terminator

The Lynx Smart BMS ships together with two VE.Can RJ45 terminators.

Battery Management System

The Lynx Smart BMS is a dedicated Battery Management System for Victron Lithium Smart Batteries. It contains a positive and a negative busbar, a BMS, a contactor and a battery monitor. It is part of the Lynx Distribution system.

The Lynx Smart BMS has a status LED and a Bluetooth LED.

The Lynx Smart BMS can communicate via Bluetooth with the VictronConnect app and can communicate via VE.Can with an GX device.

VictronConnect app

The Lynx Smart BMS and up to 4 connected Lynx Distributors can be monitored and setup with the VictronConnect app. For more information see the [VictronConnect app download page](#) and the [VictronConnect manual](#).

GX device

The Lynx Smart BMS and up to 4 connected Lynx Distributors can be monitored with a GX device. For more information on the GX device see the [GX device product page](#).

The GX device can be connected to the VRM portal allowing for remote monitoring.

For more information on the VRM portal see the [VRM page](#).

Lithium Smart Batteries

The Lynx Smart BMS is a dedicated BMS for the Victron Energy range of Lithium Smart batteries. These batteries are lithium iron phosphate (LiFePO4) batteries and are available in 12.8V or 25.6V and in a variety of capacities. They can be connected in series, parallel and series/parallel so a battery bank for system voltages of 12V, 24V or 48V can be created. Up to four 12.8V batteries or two 25.6V batteries can be connected in series. Up to 5 batteries or battery series strings can be connected in parallel.

For more information about these batteries see the [Lithium Smart battery product page](#).

The Lynx Distribution System

The Lynx Distribution System consist of the following parts:

- **Lynx Power In** - A positive and negative busbar with 4 connections for batteries or DC equipment.
- **Lynx Distributor** - A positive and negative busbar with 4 fused connections for batteries or DC equipment together with fuse monitoring
- **Lynx Shunt VE.Can** - A positive busbar with a space for a main system fuse and a negative busbar with a shunt for battery monitoring. It has VE.Can communication for monitoring and setup with a GX device.
- **Lynx Smart BMS** - For use together with Victron Energy Smart Lithium batteries. It contains a positive busbar with a contactor that is driven by a battery management system (BMS) and a negative busbar with a shunt for battery monitoring. It has Bluetooth communication for monitoring and setup via the VictronConnect App and VE.Can communication for monitoring with a GX device and the VRM portal.



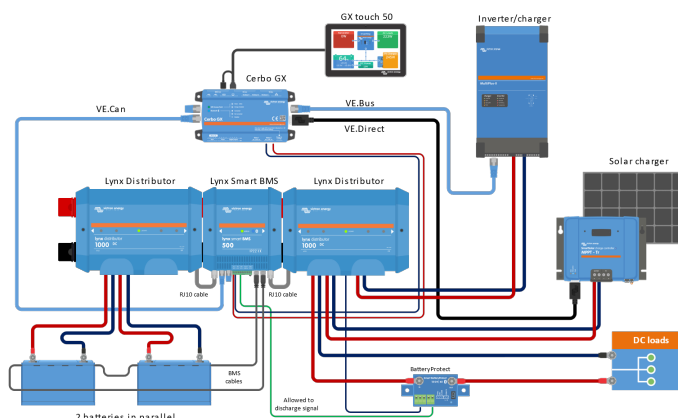
The Lynx modules: Lynx Power In, Lynx Distributor, Lynx Shunt VE.Can and Lynx Smart BMS

Lynx Smart BMS	
POWER	
Supply voltage range	9 - 58 Vdc
Supported system voltages	12, 24 or 48V
Reverse polarity protection	No
Main safety contactor continuous current rating	500A _{dc} continuous
Main safety contactor peak current rating	600A for 5 minutes
Power consumption hibernate or standby mode	Approximately 10.4mW (0.8mA at 13V)
Power consumption in active mode	Approximately 2.6W (200mA at 13V) depending on the state of the relays
Minimum load resistance for pre-charging	10Ω and above for 12V systems 20Ω and above for 24V and 48V systems
AUX output maximum current rating	1.1A continuous, protected by resettable fuse
Allow-to-charge port Maximum current rating	0.5A at 60Vdc, protected by resettable fuse
Allow-to-discharge port Maximum current rating	0.5A at 60Vdc, protected by resettable fuse
Alarm relay (SPDT) Maximum current rating	2A at 60Vdc
CONNECTIONS	
Busbar	M8
VE.Can	RJ45 and RJ45 terminator
I/O	Screw terminals
Battery BMS cables	Male and female circular 3-pole connector with M8 screw ring
Lynx distributor (up to 4 modules)	RJ10 (cable ships with each Lynx Distributor)
PHYSICAL	
Enclosure material	ABS
Enclosure dimensions (h x w x d)	190 x 180 x 80 mm
Unit weight	1.9 kg
Busbar material	Tinned copper
Busbar dimensions (h x w)	8 x 30 mm
ENVIRONMENTAL	
Operating temperature range	-40°C to +60°
Storage temperature range	-40°C to +60°
Humidity	Max. 95% (non-condensing)
Protection class	IP22

System example – Lynx Smart BMS, 2x Lynx Distributor and lithium batteries

This system contains the following components:

- Lynx Distributor with 2 fused paralleled Lithium Smart batteries.
- Lynx Smart BMS with BMS, contactor and battery monitor.
- Lynx Distributor provides fused connections for inverter/charger(s), loads and chargers. Additional modules can be added if more connections are needed.
- A Cerbo GX (or other GX device) to read out the Lynx Smart BMS and Lynx Distributor data.



System with Lithium Smart Batteries, 2x Lynx Distributor, Lynx Smart BMS, Cerbo GX, GX Touch 50, MultiPlus-II, SmartSolar charge controller, solar panels and Smart BatteryProtect.