PHOTOVOLTAIC

 $\underline{https://www.qoltec.com/product/photovoltaic?battery-energy-storage\&duplicate-qoltec-energy-storage-lifepo4-battery-5kwh-24v-bms-lcd$ 



# Qoltec Stable Energy storage LiFePO4 | 4.8kWh | 48V | 100Ah | BMS| LCD

Product code: 53710

Qoltec branded energy stores can safely store and manage energy generated from renewable sources such as solar power. Using state-of-the-art LiFePo4 technology, it can achieve several thousand charge and discharge cycles. Built-in BMS-type software guarantees safe use by controlling the battery's charge and discharge levels. It has RS485 and RS232 ports. Compatibility list in parameters.

### STORE UP ENERGY AND USE IT WHENEVER YOU WANT!



# Stable, reliable and environmentally friendly power supply at any time of day

Qoltec energy storage will significantly increase the functionality of your photovoltaic installation and provide a stable and environmentally friendly power supply . It can efficiently store surplus energy acquired during the day that we are unable to consume at any given time, until it is fully charged for use at a later time when current production ceases or is below demand, e.g. during power cuts. The stored energy is available at all times when the storage is discharged, electricity is drawn from the grid. Surplus energy can also be sent to the grid.

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#### SUSTAINABLE ENERGY IN ONE STORAGE



# Precise power and voltage regulation, energy independence, real-time monitoring and a wide range of security features Main functions of Qoltec energy storage:

- You can make the most of the energy you produce and use it at a later time, such as on cloudy days or at night,
- You gain energy independence and security in case of grid failure, the storage will also work well in a place where there is no access to the grid,
- You significantly **reduce the effects of overloading the power grid** by storing surplus energy,
- The storage regulates power and voltage and removes interference that reduces the quality of the energy produced,
- You support the development of renewable energy sources,
- It has a built-in LiFePO4 lithium-iron-phosphate battery.

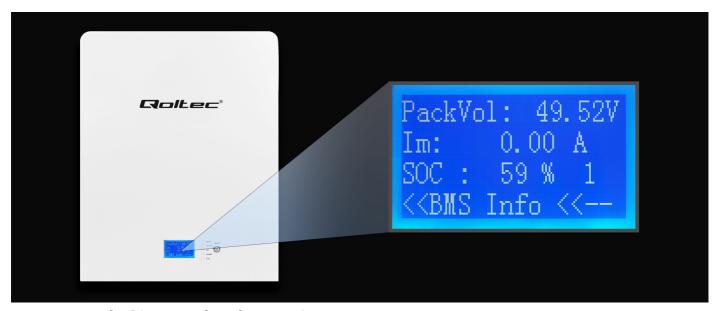
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### Powerful and discharge-resistant LiFePO4 batteries

Qoltec's energy storages are equipped with extremely **powerful and deep discharge** resistant lithium-iron-phosphate batteries - **LiFePO4**. The advantage of this battery is undoubtedly its long service life of up to **several thousand charge and discharge cycles, as well as its lightness and the lack of memory effect**, which causes a loss of actual capacity. LiFePO4 batteries **do not pollute the environment**, are non-toxic and **non-flammable**, which increases the safety of their use in photovoltaics.

### CHOOSE FULL CONTROL, CHOOSE OUR INNOVATIVE ENERGY!



### Easy control of battery level and other parameters

The product features a multifunctional, easy-to-use LCD display with control panel. It allows control and monitoring of the battery status. In addition, the display informs you of failures, reacting accordingly if any parameter exceeds the norm. Combining efficiency with transparency, we provide you with full control of your energy, step by step, on screen, for your convenience

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# Battery Management System

## Cell protection against overheating, overcharging and deep discharge

Advanced BMS:

- Constantly monitors and controls the battery's operating parameters, ensuring optimum performance, even charging and discharging,
- Protects cells from overheating, overcharging and deep discharge, which can damage the battery.

### FULL OPERATIONAL SAFETY - YOUR ENERGY STORAGE WORKS IN COMPLETE SAFETY



### Equipped with a comprehensive security kit to protect your system

**UVP protection** – protects devices from too low voltage at the output, which affects the stability of connected devices, **SCP protection** – is a short circuit protection, **OVP protection** – is protection against too high output voltage and damage to connected devices, **OCP protection** – is protection against too high current on the line, **OTP protection** – is protection against overheating.

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### **CONFIDENCE CONFIRMED BY A WARRANTY**



Product covered by a 24-month warranty

Our company is committed to providing technical support and customer service, making our guarantee a comprehensive commitment to customer satisfaction for two years from the date of purchase. The included protocol is an integral part of the warranty and is necessary to file a claim for faulty goods within 24 months of purchase. Harvest clean energy with our energy storages!

### **TECHNICAL DATA**

Producer	Qoltec
Cell type	LiFePO4
Nominal voltage	48V
Capacity	100Ah
Charge voltage	58.4V
Cut off voltage	44.80V (0.01C)
Variable charging voltage	55.20V 0.1V
Standard charging current	20A
Standard discharging current	20A
Maximum charging current	50A
Maximum discharge current	100A
Waveform	Pure sine wave
Internal resistance	40m
Number of batteries	15
Number of charging cycles	3000 (100% DOD)
Communication	RS485, RS232, CAN

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Compatibility	000-PACE RS232 V1.7-2022.10.22
	000-PACE RS485 MS V1.0-2018.06.15
	RS485:  000-PACE RS485 Modbus V1.1-2017.06.27  001-PYLON RS485 LV V3.5-2019.12.23  002-Growatt RS485 V2.02-2019.07.24  003-Voltronic RS485 Inverter V1.5-2022.01.18  011-VISION RS485 V1.3-2019.07.17  012-Luxpowertek RS485 Inverter V0.3-2020.07.06  036-WOW RS485 Modbus V1.3-2017.06.27  CAN:  001-PYLON CAN Inverter EMS  001-PYLON CAN I.V V2.0.6-2022.05.10  002-Growatt CAN LV V1.05-2019.08.28  002-Growatt CAN LV V1.09-2020.10.22  005-SofarSolar CAN inverter V5  007-GoodWe CAN Inverter VV77-2020.02.28  010-Victron CAN 2021.01.07  012-Luxpowertek CAN V1.0-2020.02.11  013-Sorotec CAN Inverter V1.0  014-GINLONG CAN LV V1.0-2019.12.28  015-Schneider CAN V2.0  017-SMA CAN V2.0  028-Schergy CAN V1.1-2022.05.10  030-MUST CAN PV1800F  030-MUST CAN V1.05-2021.06.02  031-MEGAREVO CAN Inverter LV V1.1  033-TBB CAN V1.05-2021.04.20
	033-1BB CAN V1.05-2021.04.20 035-STUDER CAN V1.02-2018.06.14
Additional information	Supports BMS
Notices	We require the device to be installed by a qualified installer with the appropriate authorization. In case of installation by unauthorized persons, the warranty will automatically expire.  The included protocol is an integral part of the warranty and is necessary to file a claim for defective goods within 24 months from the date of purchase.
Housing color	White, black
Protection	UVP - protects against under-voltage at the output,  SCP - is short-circuit protection,  OVP - is protection against too high output voltage,  OCP - is protection against too high line current,  OTP - is protection against overheating.
Usage	Storage of excess energy generated by the photovoltaic installation Emergency power systems
Operating temperature range	Charge : 0°C ~ +45°C Discharge : -25°C ~ +55°C
Storage temperature range	Less than 1 months : -10°C ~ +45°C Less than 3 months : -10°C ~ +35°C More than 3 months : 0°C ~ +30°C
IP Rating	IP55
Dimensions (D/L x W x H)	580 x 450 x 180 mm
Package contents	1 x LiFePO4 energy storage 1 x Mounting accessories 1 x Mounting protocol 1 x User Manual
Package depth / length [mm]	582
Package width [mm]	680
Package height [mm]	290
Net weight [kg]	54.500
Gross weight [kg]	56.000
Certificate	CE
Warranty	24 month
EAN code	5901878537108

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