

CELL POWER

Robust LiFePO4 Batteries

The durable and life-proof battery for many applications

Highlights

- Up to 6.000 charging cycles at 50% Depth of Discharge (DoD)
- Up to 10 times more cycles and 2 times longer range compared with AGM batteries
- Compact and lightweight (1/3 of the weight and 1/2 of the size of a lead-acid battery)
- IoT module available for constant monitoring – ideal for service and maintenance purposes
- Largest driving range compared to other lithium batteries
- 1:1 exchangeable with standard AGM/GEL batteries
- High resistance to short and deep discharges
- CAN-bus communication



Exploring the World of LiFePO4 Batteries

LiFePO₄, or Lithium Iron Phosphate, batteries have revolutionized the landscape of energy storage solutions. These batteries have gained immense popularity among various user segments. Understanding the fundamentals of LiFePO₄ batteries sheds light on their remarkable features, advantages, and diverse applications across different industries.

The Chemistry

LiFePO₄ batteries derive their name from their chemical components, which include lithium as the active element, iron phosphate as the cathode material, and a porous separator. This unique chemistry offers inherent stability, increased safety, and exceptional resistance to thermal and chemical stress, distinguishing them from traditional lithium-ion batteries.

Advantages

The remarkable advantages of LiFePO₄ batteries lie in their high energy density and extended cycle life. These batteries can endure approximately 2,000 to 7,000 charge cycles, far exceeding conventional options. Their low self-discharge rate ensures they retain up to 80% of their charge even after prolonged storage. Additionally, their safety features, including a Battery Management System (BMS), resistance to thermal runaway and overcharging, make them an ideal choice for safety-conscious applications.

CELL POWER

BMS AND CAN-COMMUNICATION

Easy communication with CAN-compatible monitoring systems

Wide range of parameters/information available for optimal monitoring of your battery:

- State of Charge (SoC), Voltage, and Ah
- Temperature
- Individual cell voltage
- Lifetime – number of cycles
- State of Health (SoH)
- Active logging information

Several types of monitoring systems available

IoT module available for constant monitoring – ideal for service and maintenance purposes

CAPACITY

Available in various power ratings and capacities:

- **CLF 80-24**
(80Ah – 24V): 1:1 replacement for the Cellpower CLN 70-24
- **CLF 60-24**
(60Ah – 24V): 1:1 replacement for the Cellpower CLN 60-24
- **CLF 40-24**
(40Ah – 24V): 1:1 replacement for the Cellpower CLN 40-24
- **CLF 40-48**
(60Ah – 48V): 1:1 replacement for the Cellpower CLN 35-48

Up to 6 batteries can be connected in parallel (more if needed, TBD)

Maximum Depth of Discharge (DoD) of 100%

Charging and discharging with a maximum of 1C

THE PERFECT COMBINATION WITH CELLPPOWER ACCESSORIES

For optimal operation and lifespan, we recommend using our Cellpower Lithium chargers

Various monitoring systems available

Our CLF Series batteries are best paired with our CCL and L CP battery chargers for optimal performance and longevity.



QUALITY

UN 38.3 certified

IEC 62133:2017 certified

Metal housing

Very robust internal construction capable of withstanding shock and vibration levels typical for EV applications and transport

5-year warranty