



PRODUCT DATA SHEET

12.8V 100Ah LiFePO4 Lithium Battery

SPECIFICATIONS

Model	LFPO401PDK98394
ERP No.	BP.6.3.3.96108
Typ. Capacity	100 Ah <i>(0.5C, 10.0V discharge)</i>
Min. Capacity	98 Ah <i>(0.5C, 10.0V discharge)</i>
Weight	9300 g ± 150 g

CHARGING CHARACTERISTICS PER BATTERY PACK

Charge Voltage	14.40 V
Standard Charge Current	50 A
Max. Charging Current	50 A
Operating Temperature	0°C to +50°C

PCM PARAMETER PER BATTERY CELL

Overcharge Det. Voltage	3.75 V ± 0.05 V
Overcharge Rel. Voltage	3.55 V ± 0.15 V
Overdischarge Det. Voltage	2.20 V ± 0.08 V
Overdischarge Rel. Voltage	2.70 V ± 0.10 V
Overcharge Current Range	50.0 A – 90.0 A
Overdischarge Current Range	250.0 A – 450.0 A
Connection Type	N/A
Features	Supports 4 series, 4 parallel connection SoC Display

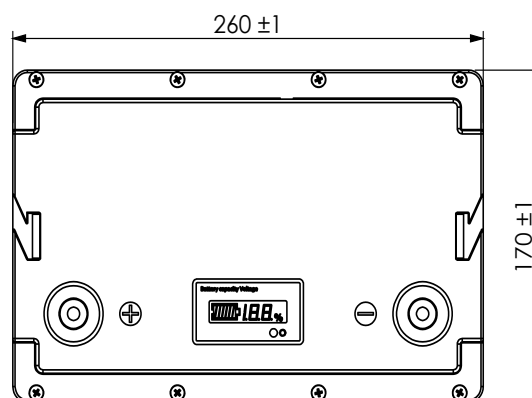
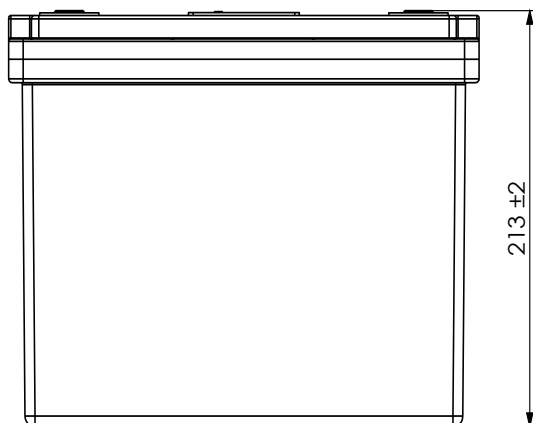
DISCHARGING CHARACTERISTICS PER BATTERY PACK

Cut-off Voltage	8.80 V ± 0.2 V
Standard Discharge Current	50 A
Max. Continuous Discharging Current	100 A
Operating Temperature	-15°C to +50°C
Storage Temperature	-10°C to +25°C (max. 6 months)
Life Expectancy 0.5C/0.5C @ 25 ±2°C %80 DOD / SOH	5000 cycles ~ 80% of capacity

COMPLIANCE INFORMATIONS



TECHNICAL DRAWING



HANDLING AND STORAGE

Important notice:

If the battery is for backup use or if battery will be outside of the given temperature ranges – please consult with Birikim Pilleri

When used correctly, Lithium-Battery-Packs / Rechargeable Lithium-Batteries provide a safe and dependable source of power. However, if they are misused or abused, leakage, venting, or in extreme cases explosion and / or fire may result. Make sure to observe amongst others, following warnings.

Caution:

Do not incinerate, disassemble, short terminals, expose to high temperature 100°C (212°F) risk of fire, explosion. Keep small cells and batteries which are considered swallowable out of the reach of children.

Swallowing may lead to burns, perforation of soft tissue and death. Severe burns can occur within 2 h of ingestion.

In case of ingestion of a cell or battery, seek medical assistance promptly.

Handling

- Do not insert batteries in reverse. Observe the polarity markings on battery and equipment
- Do not short-circuit batteries
- Do not overcharge batteries
- Do not force discharge batteries
- Do not mix batteries
- Do not overheat batteries by exposure to high temperatures and direct sunlight.
- Do not weld or solder directly to batteries
- Do not dismantle batteries
- Do not deform batteries
- Do not dispose of batteries in fire
- A battery with a damaged pouch should not be exposed to water
- Do not allow children to replace batteries without adult supervision
- Keep batteries out of the reach of children. In case of ingestion of a cell or battery, the person involved should seek medical assistance promptly
- Equipment intended for use by children should have battery compartments which are tamper-proof

- Do not encapsulate and/or modify batteries
- Exhausted batteries should be immediately removed from equipment and disposed of
- When discarding batteries with solder tags, insulate the tags by wrapping them with tape, foil, etc.

Storage

- Store unused batteries in their original packaging and keep them away from metal objects which may short circuit them.
- Storing unpackaged cells together could result in cell shorting and heat build-up
- Store and display batteries in their original packaging in well ventilated, dry and cool conditions
- Avoid storing or display batteries in direct sun or in places where they get exposed to rain
- The normal storage of Lithium-ion Battery Pack is made at temperature between +10°C and +25°C, never exceeding +30°C In this way the maximum shelf-life (i.e. max. retention of cell performances after storage periods) of Lithium-Ion-Battery Pack is achieved
- Storage temperatures above room temperature will increase the rate of self-discharge, reducing the available capacity of the cell. Humidity above 95%
- R.H. and below 40% R.H. should also be avoided for sustained periods, as these extremes are detrimental to batteries
- Storing the cells / batteries at low temperature is also suggested, but attention must be paid when transferring the cells to warmer environments, because of the possibility of having water condensing on to the cells (risk of short circuits)
- Do not stack battery cartons on top of each other exceeding a specified height. The height is clearly dependent on the strength of the packaging. As for general rule this height should not exceed 1.5 m for cardboard packages or 3 m for wooden cases. The above recommendations are equally valid for storage conditions during prolonged transit. Thus, batteries should be stored away from ship engines and not left for long periods in unventilated metal box cars (containers) during summer.

Charge

- Charging method must be Constant Current – Constant Voltage (CC-CV)
- The specified charging characteristics shall not be exceeded