

# High C-rate 20Ah & 50Ah Long Cycle Life LFP Pouch Battery Cell

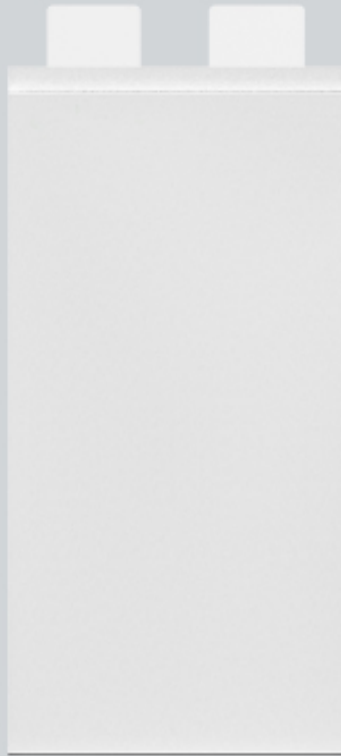
## Key Specifications

Capacity	20Ah	Voltage	3.7V
Model	PJ20F-E & PA50F-E	Operating Temp	-30°C~55°C

## Product Overview

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For engineers developing electric motorcycles and hybrid agricultural machinery, finding a power source that perfectly balances high energy capacity with extreme durability is a constant challenge. LiTrue introduces the Long Cycle Life Energy-Type LFP Pouch Battery Cell Series, precision-engineered to bridge this gap. Designed for applications requiring continuous operation, frequent cycling, and a dramatically lower Total Cost of Ownership (TCO).



## Striking the Perfect Balance: Energy & Longevity

Available in two highly versatile capacities—20Ah (Model PJ20F-E) and 50Ah (Model PA50F-E)—this series utilizes optimized energy-oriented electrode formulations housed in an advanced stacked pouch structure. The result is a highly efficient cell that delivers an impressive 164–167 Wh/kg energy density without compromising the inherent, unyielding safety of Lithium Iron Phosphate (LFP) chemistry.

More importantly, these cells are built to last, achieving  $\geq 3000$  cycles at a rigorous 1C/1C rate, ensuring

your power systems run longer, harder, and safer.

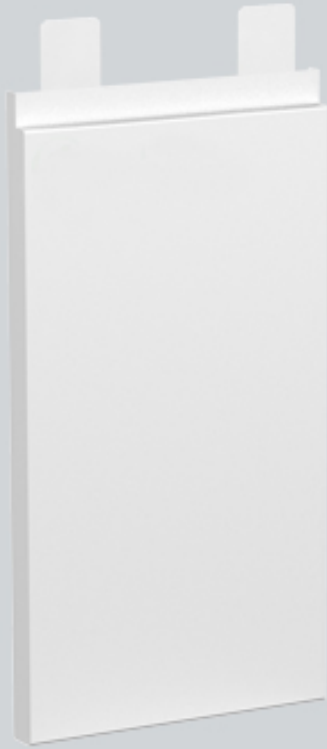
## Key Features & Engineering Advantages

- **Optimized Energy-Type LFP Design:** Achieves higher energy density (up to 167 Wh/kg) within a compact footprint, allowing for lighter vehicles and extended operational ranges.
- **Exceptional Cycle Life:** Proven to deliver  $\geq 3000$  cycles at 1C/1C, significantly reducing battery replacement frequency and long-term maintenance costs.
- **Stable & Reliable Discharge:** Supports a solid 2C to 3C continuous discharge rate, with pulse capabilities up to 4C to handle sudden acceleration or heavy load spikes.
- **Wide Operating Temperature:** Performs reliably in harsh outdoor environments, from freezing  $-30^{\circ}\text{C}$  conditions to scorching  $55^{\circ}\text{C}$  heat.
- **Advanced Stacked Pouch Structure:** Features ultra-low internal resistance, lightweight construction, and highly efficient heat dissipation, making pack assembly and thermal management much simpler.

## Technical Specifications (PJ20F-E & PA50F-E Models)

Review the specific data for our 20Ah and 50Ah LFP pouch cells below. Our engineers are fully equipped to design custom battery pack solutions tailored to your specific voltage platforms based on these cells.

Specification	Model: PJ20F-E	Model: PA50F-E
Nominal Capacity	20 Ah	50 Ah
Energy Density	164 Wh/kg	167 Wh/kg
Max. Continuous Charge Rate	2C	2C
Max. Continuous Discharge Rate	2C	3C
Max. Pulse Charge Rate	4C	3C
Max. Pulse Discharge Rate	4C	4C
Operating Temperature	$-30^{\circ}\text{C} \sim +55^{\circ}\text{C}$	$-30^{\circ}\text{C} \sim +55^{\circ}\text{C}$
Cycle Life (1C/1C)	$\geq 3000$ cycles	$\geq 3000$ cycles
Dimensions (T×W×H, mm)	9.2 × 90 × 231	12.8 × 161 × 232



## Ideal E-Mobility & Industrial Applications

This series is specifically engineered for power applications that demand a rigorous combination of range, durability, and safety:

- Electric Motorcycles & Scooters: Providing the long range and reliable pulse power needed for daily urban commuting.
- Electric Two-Wheelers & Three-Wheelers: Ensuring consistent daily cycling for delivery fleets and

cargo trikes.

- Hybrid Agricultural Machinery: Operating dependably in tough, wide-temperature farming environments.
- High-Usage Power Equipment: Any industrial system focused on maximizing long-term cost efficiency.

## Why Partner with LiTrue?

As a specialized manufacturer, LiTrue brings deep expertise to energy-type LFP cell development. We don't just supply cells; we provide OEM peace of mind. Our mature stacked pouch manufacturing process guarantees exceptional consistency across large batches. Every model is validated through strict, long-term cycle life testing before it leaves our facility.

With stable mass production and long-term supply capabilities, we offer complete system-level customization—from individual cells to fully integrated modules equipped with advanced BMS.

[Request Cell Samples & Technical Datasheets Today](#)