35Ah High-Safety Solid-State Battery Cell

Key Specifications

Capacity	35Ah	Voltage	3.7V
Model	PG30N-G1	Operating Temp	-50℃~55℃

Product Overview

Field Name	Value
Model Number	PG35N-G1
Classification	High-Safety Solid-State
Chemical Materials	Solid-State Lithium
Cell Structure	Pouch
Nominal Capacity (Ah)	35.0
Nominal Voltage (V)	3.70
Cell Weight (g)	465
Energy Density (Wh/kg)	280
Max. Continuous Charge Rate	1C
Max. Continuous Discharge Rate	2C
Max. Pulse Charge Rate	3C
Max. Pulse Discharge Rate	5C
Operating Temperature (°C)	-50 to 55
Dimensions (T×W×H, mm)	8.3 × 142 × 181

Other Cells in the High-Safety Solid-State Series

Model	Dimensions (T×W×H, mm)	Capacity (Ah)	Voltage (V)	Weight (g)	Energy Density (Wh/kg)	Max Continuous C/D	Max Pulse C/D	Operating Temp
PG30N-G	8.5×142×181	30	3.70	460	241	1C/2C	3C/5C	-50℃~55℃
PG35N-G1	8.3×142×181	35	3.70	465	280	1C/2C	3C/5C	-50℃~55℃

Solution

Cold-weather systems face a familiar problem: low temperatures reduce usable power margin just when takeoff, acceleration, or other peak-load events demand more of the battery. A cell selected only around nominal capacity can force the pack designer to add parallel cells and mass simply to preserve operating headroom.

PG35N-G1 is a 35Ah high-safety solid-state pouch cell built for projects that need a defined -50°C to 55°C operating range alongside usable power delivery. Its 2C continuous and 5C pulse discharge ratings support sustained load and short peak events, while 280Wh/kg helps manage system mass. View LiTrue’ s broader range of battery cells for other cell formats and electrical profiles.

Application Areas

- Industrial UAVs: 2C continuous discharge supports sustained propulsion demand, while 5C pulse capability addresses short takeoff and maneuver loads.
- Cold-Climate Equipment: the stated -50°C to 55°C operating range gives integrators a clear basis

for low-temperature system validation.

- Portable Power Systems: 35Ah capacity at 3.70V supports series-parallel battery designs where runtime, weight, and package dimensions must be balanced.
- Safety-Focused Custom Packs: the high-safety solid-state cell platform suits applications that require cell-level safety considerations as part of the pack design; see LiTrue battery-pack solutions for integration support.

FAQs

What continuous and pulse current can PG35N-G1 deliver?

PG35N-G1 is rated for 1C continuous charging, 2C continuous discharge, 3C pulse charging, and 5C pulse discharge. Based on 35Ah capacity, this equals 70A continuous discharge and 175A pulse discharge; confirm permitted pulse duration and thermal conditions for the final design.

Can PG35N-G1 operate at low temperatures?

Yes. The stated operating-temperature range is -50°C to 55°C. Actual available capacity, charging performance, and thermal behavior must be validated under the intended load profile.

What pack voltage can be built with this cell?

Each cell is 3.70V nominal. For example, a 12S configuration is 44.4V nominal and a 14S configuration is 51.8V nominal. Contact LiTrue’ s engineering team to define the appropriate series-parallel configuration.

What is the cycle life of PG35N-G1?

Cycle-life data for this model should be confirmed with LiTrue engineering or laboratory documentation before it is included in a customer specification. Cycle performance depends on charge/discharge rate, depth of discharge, operating temperature, and pack thermal management.