

## DATA SHEET

# PAG L90 Slim Battery

WHEN EVERY OUNCE COUNTS



*The industry's first battery Run-Time & Capacity display that adjusts according to its orientation to maintain legibility.*

- Highest energy density of any 90Wh V-Mount Li-Ion battery brought to market
- Slim form factor and an ultra-compact, lightweight design
- The latest high-current cells with a continuous 10A current-draw capability
- Designed to withstand the vibration of UAV-mounted applications
- The industry's first reorienting battery Run-Time & Capacity Display
- Intelligent battery that manages its own charge and discharge safely
- Auto-compatible with camera data systems and viewfinder displays
- Independently UN tested, flight-friendly design

## DESCRIPTION

PAG has developed a new battery that offers a slim form factor and a weight of only 567g. It has been designed for small digital cinema type cameras, especially when mounted to gimbals or drones.

The L90 Slim features the latest high-current Li-Ion cells, that contribute to the battery's slim form-factor. It has a capacity of 90Wh, and a continuous current-draw capability of 10A, which gives it the highest energy density of any V-Mount Li-Ion battery of equivalent capacity brought to market.

PAG-designed firmware is incorporated, making it an intelligent battery that manages its own charge and discharge safely. It can be charged using any reputable V-Mount Li-Ion charger. Reliability, durability and longevity are integral to the battery design, providing an unbeatable return on investment.

PAG has incorporated its own proven and tested electronic protection system, to ensure the highest possible level of safety. All PAG Li-Ion batteries are tested to UN standards by an independent authorised facility in order to meet the Air Transport authority regulations. PAG is one of the only manufacturers that labels its batteries with the test report number. In addition to testing, a capacity below 100Wh ensures that the battery is flight-friendly and suitable for transport on passenger aircraft without quantity restriction.

An important consideration in the design of the cell-pack was ensuring that it could withstand the vibration caused when mounted to multi-rotor aerial platforms. PAG has incorporated spacers between the cells to prevent the negative affects of vibration.

Another unique feature is the orientation-sensing numeric Run-Time & Capacity Display, positioned on the side of the battery. The display characters rotate automatically according to the battery's orientation, to ensure legibility. Run-time is displayed to a resolution of 1 minute. Capacity is displayed in 1% increments. PAG was the first to introduce a numeric Run-Time display over 16 years ago, and is now the first to offer an orientation-sensing battery display.



*The PAG L90 Slim is designed for use on unmanned aerial vehicles.*

In keeping with the latest PAG-developed technology, the L90 communicates automatically with different camera data systems and displays its remaining capacity in the camera viewfinder and LCD.

The battery is future-proof to accommodate changes in charger and camera technology. Firmware can be updated easily in the field, via the contacts.

The battery case is manufactured from high-impact, injection-moulded polycarbonate, a material which is inherently very strong and also used for motorcycle crash helmets. Additionally, the internal case design protects the cell-pack against damaging impact.

The battery features a multi-level electronic protection system which is fail-safe and guards against conditions that reduce battery life. The circuits are conformally-coated to protect them and ensure the operation of the safety systems in the event of damage to the battery.

## SPECIFICATION

**Model No. 9307V**

**Capacity:** 6.1 Ampere-hours nominal, 90 Watt-hours.

**Cells:** Premium grade, high-capacity, high-current, sealed Lithium-Ion rechargeable cells.

**Battery Connector:** V-Mount

**Voltage:** 14.8V nominal. 8 cells connected in series/parallel (4S2P). Each cell has a nominal voltage of 3.7V.

**Output Current:** The rated maximum continuous output current is 10 Amperes.

**Charge Voltage:** 16.8V.

**Run-Time & Capacity Display:** Numeric Display that senses the orientation of the battery and adjusts accordingly, for legibility.

The display shows a run-time prediction on-load, expressed in hours and minutes, to a resolution of 1 minute. Capacity/state-of-charge is displayed as a percentage, in 1% increments.

**Construction:** High-impact polycarbonate injection mouldings designed to protect the cells from impact damage. Inter-cell separation offers additional protection.

The cells have welded interconnections of low-resistance nickel strap. The battery case is sealed.

**Protection:** The battery incorporates a multi-layered electronic protection system that guards against over-current, over-voltage, under-voltage, over-temperature and under-temperature.

The protection system circuit is conformally-coated to protect it, and ensure operation of

the safety systems in the event of damage to the battery.

**Temperature Range:**

**Charging:** 0°C to +40°C (Optimum +10°C to +30°C).

**Discharging:** -20°C to +50°C (Optimum +5°C to +40°C).

**Storage:** -10°C to +40°C (Optimum 0°C to +20°C).

**Dimensions:**  
**Height:** 140mm  
**Width:** 85mm  
**Depth:** 35mm

**Weight:**  
567g



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