DATA SHEET

MPL99 V-Mount Cinergy Battery

PAG-8242 / EAN 5060854320520

- Rechargeable Lithium-Ion.
- 99 Watt-hours, 14.8V 6.7Ah.
- Features Cinergy series-linking technology that combines battery voltages to power high-voltage equipment such as the Arri Alexa 35.
- Incorporates an infrared sensor that reads a barcode applied to the battery mount to instigate high-voltage mode (with a display button press as a safeguard).
- Link with a standard MPL or another Cinergy battery to achieve high voltage.
- Fly with the power you need for 28V equipment (28V Li-Ion batteries are not permitted on passenger flights).
- Away from the barcode, the battery switches to low voltage mode for charging or PAGlink parallel linking, combining capacities.
- Current draw capability of 12A when linked in parallel, 10A individually or when linked in series.
- Hot-swap batteries for continuous power in PAGlink parallel linking mode.
- 2 x built-in D-Tap outputs (12V).
- USB output unit (5V 2A), which can be swapped for other unit types: USB-C, Hirose & Lemo.
- The best Li-Ion cell for high-current capability and capacity retention above 500 cycles, according to NASA Battery Workshop.
- 4 x 1/4” bushes for mounting accessories.
- Numeric Run-Time, Charge Status & Data Display.
- Intelligent battery that communicates and manages its own charge and discharge safely.

- Compatible with PAG and Sony 14V V-Mount Li-Ion chargers.
- Compatible with camera data systems that display state of charge in the viewfinder/LCD.
- Ergonomic design; ‘soft-touch’ outer-band for secure handling, and additional protection features.
- New modular design that allows easier servicing and authorised cell-pack replacement for greater sustainability.
- Independently tested to UN standard to meet air transport regulations.
- 2 year warranty with unlimited cycles during that period.

Cinergy for High Voltage Equipment

The new MPL99 Cinergy Battery is a Mini PAGlink solution for high-voltage equipment.

The Cinergy Battery can be linked with any Mini PAGlink battery in series, combining the voltage output to power cameras such as the Arri Alexa 35. Power is delivered in the range 24V to 33.6V.

The Cinergy battery will switch to high-voltage mode when (1) its infrared sensor reads a barcode label applied to the equipment's battery mount, (2) it is linked to another MPL battery in a similar state of charge and (3) it's display button is pressed-in for 3 seconds.

Any MPL battery can be linked with the Cinergy Battery to achieve high-voltage. The voltage output is always the sum of 2 MPL batteries linked in series regardless of how many are in the stack.

Once removed from the barcode, the batteries revert to low-voltage mode, suitable for charging with a standard 14V charger, or for powering low voltage equipment.

Mini PAGlink Parallel Linking

PAG's patented PAGlink battery linking technology combines the batteries capacities, linking them in parallel, and enabling you to discharge them simultaneously. Start your day's shooting with two, fully-charged batteries on your camera and experience a variety of benefits, that include:

- Longer run-time with fewer battery changes
- More power for accessories
- Continuous power through hotswapping
- The ability to add another battery to stay powered-up
- Stacked battery charging

Flight-Friendly

28V Li-Ion batteries and Li-Ion batteries that have an individual capacity greater than 160Wh are not permitted on passenger aircraft. With Mini PAGlink Cinergy you can fly with 14.8V 99Wh batteries and link them on location to achieve the high-voltage or high-capacity power that you need.

Unbeatable Versatility

The MPL99 Cinergy Battery can be used to power everything from smaller 4K camcorders, where its dimensions are a perfect complement, to larger, high-voltage cameras used for cinematography. It will power them in combination with accessories such as monitors, lights and wireless receivers, and provide a single, superior power source for the set-up. It features 2 fixed D-Tap outputs for 12V accessories and a USB unit (5V 2A), which can be swapped easily by the user for a plug-in USB-C, Lemo or Hirose.

Less Weight or More Power

With intelligent battery linking, you can control the capacity and weight of your power source to suit the application: 1 battery for handheld applications, 2 to 3 batteries for more current or longer run-time. Linking two 99Wh MPL99 batteries in parallel doubles the capacity to 198Wh; 3 batteries provide 297Wh.

NASA Approved Cells

PAG's Mini PAGlink batteries feature the highest-quality Li-Ion cells, selected by the NASA for their mission to Europa, one of Jupiter's moons. The NASA Battery Workshop found they offered 'the most favourable combination of energy and cycling stability and high rate capability up to 10A'. They also demonstrated the best capacity retention after 500 cycles.

More Current & Better ROI

When batteries are linked in parallel, and in similar state of charge, the current-draw capability increases from 10A to 12A. This is ideal for camera set-ups that require power for multiple accessories. Sharing the current load between batteries contributes to an extended overall battery life and a better return on investment. PAG provides a 2 year warranty for the MPL99 Cinergy battery, with no limit on the number of cycles during that period.

Hot-Swap or Add

PAGlink allows seamless hot-swapping for continuous power, or the ability to add another battery just to keep shooting; putting an end to time-consuming camera reboots.

No Dead Weight

Simultaneous rather than sequential discharge means that there are no unused batteries adding dead weight to the camera.

Intelligent Linking

When linked, the batteries form a network that enables them to communicate with each other, managing the output safely, and preventing the transfer of charge between batteries. A fully-charged battery can be linked safely to one that is fully-discharged.

Compatibility & Integration

The MPL99 is compatible with full-size V-Mount camera plates. It can be linked to any Mini PAGlink V-Mount battery for discharging or charging, regardless of rated capacity. It can be charged using PAGlink or Sony chargers, for maximum versatility and economic integration.

Swappable Output Units

Choice of Output Units

Hirose (4-Pin)
PAG-9712H

Lemo (2-Pin)
PAG-9712L

USB (2A)
PAG-9712U

D-Tap
PAG-9712D

2.1 - 2.5mm
PAG-9712P

USB-C PD 36W
PAG-6002

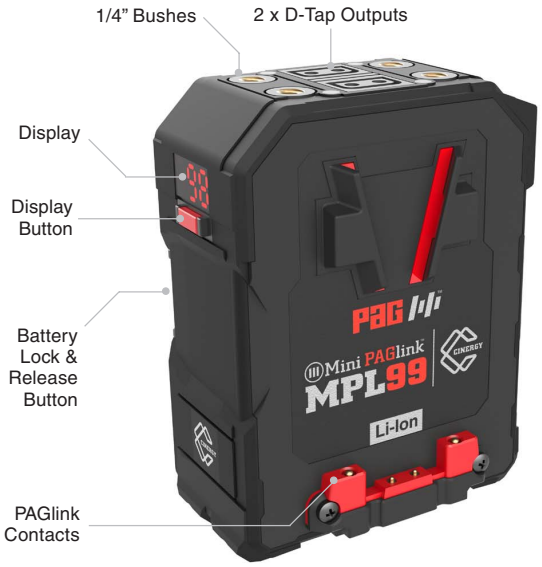
More Mounting Positions

Each battery features four 1/4" bush inserts. These can be used for mounting camera accessories to individual or linked batteries.

Run-Time, Charge Status & Data

PAG's unique battery display shows remaining run-time, on-load, in hours and minutes. When batteries are linked, the run-time figure is for the entire stack. A single button press shows individual battery charge status as a percentage of full, in 1% increments. 3 button presses and hold, provides access to the data menu where amongst other useful information, the number of cycles can be displayed. This data is available to assist with battery management.

MPL99V Cinergy Front



MPL99V Cinergy Back

Patents Apply: paguk.com/patents

In-Viewfinder Information

MPL batteries communicate automatically with multiple camera data systems, to display their state of charge in the viewfinder and LCD.

Flight Friendly

The MPL99 is a 99Wh battery and IATA permits 20 units of 100Wh or less in your personal allowance when you fly. All PAG Li-Ion batteries are tested to UN standards by Intertek Group PLC, an independent authority and certified to comply with air transport safety regulations.

Linked Battery Charging

The MPL99 Cinergy battery must be charged using 14V Li-Ion chargers. Linked charging allows more batteries to be charged using fewer chargers, and with less user-intervention.

Up to 10 Mini PAGlink batteries, in any state of charge, can be linked for charging with any PAGlink charger. The batteries control their own charge regime which means that Sony Li-Ion chargers can also be used.

The 2-position PAG PL16 Charger will fully-charge one fully-discharged MPL99 in 2hrs 30mins, and 8 in 12hrs. State of charge, as a percentage, is indicated on the battery’s individual display.

PAG also offers a low-cost, ultra-compact, Micro Charger, which is the ideal travel partner. It can be powered form a variety of 5-20V DC power sources, which is ideal for location use.

Ergonomic & Durable

The battery case has an ergonomic design and a ‘soft-touch’ coated outer band for safer handling. Additional protection ‘bumpers’ provide increased durability. It is manufactured from high-impact, injection-moulded ABS which is inherently very strong and flexible. This battery has been designed to withstand the harshest working conditions.

Modular & Sustainable

Mini PAGlink batteries are the first to feature PAG’s new, modular construction. This allows for easier servicing, and authorised replacement of the cell-pack, maintaining compliance with IATA regulations. Case parts and battery modules, such as the protection circuits, display and output units can be reused, resulting in less electronic waste and increased sustainability.

SPECIFICATION

Battery Connector: V-Mount.

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

Voltage: 8 cells connected in series/ parallel. Each cell has a nominal voltage of 3.7V.

Output Voltage Range (individually or linked in standard PAGlink mode):
12V to 16.8V

Output Voltage Range (2 or more batteries linked in Cinergy mode):
24V to 33.6V

Capacity: 99 Watt-hours, nominal 6.7 Ampere-hours.

Output Current: Rated maximum continuous individual output current is 10 Amperes, or 12A when linked in PAGlink parallel mode.

Charge Voltage: 16.8V.

Outputs: 2 x D-Tap, 1 x USB (5V 2A).

Numeric Display: State of charge is expressed as a percentage, in 1% increments. Run-time, on-load, is expressed in hours and minutes, in 1 minute increments. Battery data includes: voltage, temperature, number of charge/ discharge cycles and software version.

Construction: ABS injection mouldings designed to protect the cells from impact damage.

Replaceable Contact Assemblies:
The front and rear contact assemblies are external to the battery case and can be replaced if damaged.

Modular Design: The internal modules, including the cell-pack, can be replaced by an authorised service facility.

Temperature Range:

Charging:
0°C to +40°C
(Optimum +10°C to +30°C).
+32°F to +104°F
(Optimum +50°F to +86°F).

Discharging:
-20°C to +50°C
(Optimum +5°C to +40°C).
-4°F to +122°F
(Optimum +41°F to +104°F).

Storage:
+10°C to +30°C (+50°F to +86°F).

Dimensions (approximate):

Length:	110mm	4.33"
Width:	87mm	3.42"
Height:	55mm	2.16"
Weight:	630g	1.38lbs

PAG Ltd. UK
Epsom Downs Metro Centre
Units 9 & 10, Waterfield,
Tadworth, Surrey KT20 5LR

E sales@paguk.com
T +44 (0)20 8543 3131
www.paguk.com