

#### PROVISIONAL DATA SHEET

# Mini PAGlink MPL150V Battery

PAG-8341

- · Rechargeable Lithium-Ion Battery.
- 150 Watt-hours, 14.8V 10Ah.
- Intelligent linking technology that allows capacities to be combined (2 linked = 300Wh; 3 linked = 450Wh)
- Current draw capability of 12A when linked, 10A individually.
- · Hot-swap batteries for continuous power.
- Fixed outputs: USB-C (5, 9 or 12V, 27W) USB-A (5V 2.4A) and D-Tap (12V unregulated).
- Removable output: USB-A (5V 2A), which can be swapped for Hirose, Lemo or D-Tap.
- Inputs: USB-C and 2.1-2.5mm DC, for charging.
- Ideal for powering digital cinema cameras and accessories simultaneously.
- The best Li-lon 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, State of Charge & Data Display.
- Intelligent battery that communicates and manages its own charge and discharge safely.
- Up to 10 Mini PAGlink V-Mount batteries can be linked for charge or discharge, regardless of rated capacity or state of charge.
- Compatible with PAGlink and other V-Mount Li-Ion chargers.
- Compatible with camera data systems that display capacity in the viewfinder/LCD (Sony & Red).



- Ergonomic design and 'soft-touch' outer-band for secure handling.
- Durable case construction with impact protection features to withstand the toughest conditions.
- New modular design that allows easier servicing and authorised cell-pack replacement for greater sustainability.
- · Battery firmware can be updated externally.
- Independently tested by Intertek Group plc to UN 38.3 standard to meet air transport regulations.
- 2 year guarantee with unlimited cycles during that period.



# **Linking, Plus Outputs & Inputs**

The MPL150V has all the benefits of PAGlink intelligent linking technology combined with more output and input options than any other battery for broadcast or digital cimema cameras. PAG's patented battery linking technology remains far in advance of any other system available today.

The 150Wh battery is designed to complement the dimensions of smaller cameras, but is equally desirable for larger cameras. It will power cameras in combination with accessories such as lights and monitors, and can even be used to power your laptop.

The MPL150V features the following built-in outputs: a USB-A (2.4A 5V); a D-Tap (unregulated) for 12V accessories and a USB-C (5, 9 or 12V 27W).



There is also a removable USB ouput unit (5V 2.4A), which can be swapped easily by the user for a plug-in Lemo, Hirose, D-Tap or 2.1mm DC output unit.

# **Choice of Output Units**



The versatile MPL150V also incorporates USB-C and 2.1-2.5mm DC input connectors to allow charging of the battery via PD chargers and other sources. It is possible to charge a stack of batteries that includes MPL99V and MPL50V batteries via the charging input of the MPL150V battery.

## **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 or 2 batteries for more current or longer run-time. Linking two 150Wh MPL150V batteries doubles the capacity to 300Wh; 3 batteries provide 450Wh.

## **MPL150V Front**

#### 1/4" Bushes Outputs **Output Unit** Release Slider Impact Protection Display Inputs USB (2A) Display Output Unit Button Battery Soft-Touch Lock & Protective Release Band Rubber Protection Feature Impact Protection **PAGlink**

# **Intelligent Linking**

Contacts

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.

Patents Apply: paguk.com/patents



Linking two MPL150 doubles the capacity to 300Wh.

# **More Current & Better ROI**

When batteries are linked 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. Simultaneous rather than sequential discharge means that there are no unused batteries adding dead weight to the camera. Sharing the current load contributes to an extended overall battery life and a better return on investment. PAG guarantees

the MPL150V for 2 years, with no limit on the number of cycles during that period.

Main Battery Contacts

## **Hot-Swap or Add**

MPL150V Back

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.

## **NASA Approved Cells**

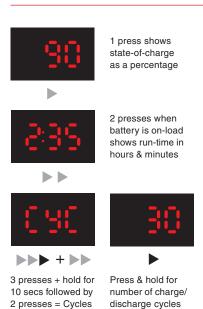
PAG's Mini PAGlink batteries feature the highest-quality Li-Ion cells, selected by NASA for their mission to Europa, one of Jupiter's moons. The NASA Battery Workshop found they offered 'the most favourable combination of energy and cycling stability and high rate capability up to 10A'. They also demonstrated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

## Compatibility & Integration

The MPL150V 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 and state-of-charge. It can be charged using PAGlink or other manufacturer's V-Mount chargers, for maximum versatility and economic integration.

## **More Mounting Positions**

Each battery features four 1/4" bush inserts. These can be used for mounting camera accessories to individual or linked batteries, or for mounting the battery to a rig without a V-Mount plate.





## Run-Time, State-of-Charge & 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 in 1% increments. 3 button presses plus hold, provides access to the data menu where amongst other useful information, the number of cycles can be displayed. This data is designed to assist with battery management.

### In-Viewfinder Information

MPL150 batteries communicate automatically with multiple camera data systems (Sony & Red) to display their remaining capacity in the viewfinder and LCD.

## Flight Friendly

Two 150Wh Li-Ion batteries per person are included in your hand-luggage allowance when you fly. PAG Li-Ion batteries are tested to UN 38.3 standard by an independent authority, Intertek Group plc, and certified to comply with air transport safety regulations.

## **Ergonomic & Durable**

The MPL150V features impact protection features to withstand the harshest working conditions. It has an ergonomic design and a 'soft-touch' coated outer band for safer handling and increased durability. The battery case is manufactured from high-impact, injection-moulded ABS which is inherently very strong and flexible.

## **Linked Battery Charging**

Linked charging allows more batteries to be charged using fewer chargers, and with less user-intervention.

Up to 10 MPL150 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 other manufacturer's Li-lon chargers can be used (dependent on the model and firmware version).

The 2-position PAG PL16 Charger will fully-charge two fully-discharged MPL150 batteries in 5 hours. Charging will be slower using the PAG Micro Charger or a PD Charger.

State-of-charge as a percentage, is indicated on the battery's individual display during charging.

#### **Modular Construction**

The MPL150V battery features PAG's new, fullyserviceable, modular construction that allows authorised replacement of the cell-pack, while enabling the battery to maintain its air transport credentials. The reusable modules contribute towards greater sustainability.

## SPECIFICATION

Connector: V-Mount.

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. The following battery data can be displayed: voltage, temperature, number of charge/discharge cycles and software version.

Construction: The ABS injection mouldings are designed to protect the cells from impact damage, and incorporate additional impact protection features

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

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

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

Voltage: 14.8V nominal. 12 cells connected in series/parallel. Each cell has a nominal voltage of 3.7V.

Capacity: 150 Watt-hours, nominal 10 Ampere-hours.

Output Current: Rated maximum continuous output current is 10 Amperes. For 2 or more linked batteries it is 12 Amperes.

Charge Voltage: 16.8V.

Protection System: The electronic protection system guards against conditions that reduce battery life.

#### **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  $+5^{\circ}$ C to  $+40^{\circ}$ C). -4°F to +122°F

(Optimum  $+41^{\circ}F$  to  $+104^{\circ}F$ ).

#### Storage:

+10°C to +30°C (+50°F to +86°F).

#### **Overall Dimensions:**

Length: 110mm 4.3" Width: 90mm 3.5" 3.1" Height: 80mm

Weight: 860g 1.9lbs



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PAG Ltd. UK 565 Kingston Road London SW20 8SA E sales@paguk.com T+44 (0)20 8543 3131 www.paguk.com