

## INTRODUCING THE **NEW ENDURA-HL9** AND **ENDURA-HL9S**

As the latest addition to the premier ENDURA battery line, the ENDURA-HL9 and ENDURA-HL9S utilises a new grade of Lithium Ion cell technology to ensure the battery is perfectly placed to handle the extra power consumption of HD cameras and accessory equipment. The E-HL9 and E-HL9S are capable of taking an impressive 10A/120W current draw, while the durability of the Li-ion cells ensure the longevity, performance and capacity of the battery does not significantly diminish over time.

# NEW ENDURA-HL9 & ENDURA-HL9S

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## **E-HL9** Features

The E-HL9 is the premier battery for the professional broadcast industry, with exceptional lifetime performance and reliability even under the most sustained power draw.

- 88Wh (minimum rated capacity) V-Mount Li-ion battery
- High current draw up to 10A/120W
- Highly durable & long-lasting Li-ion cell technology
- 500 life cycle expectancy
- PowerLink facility to connect two E-HL9's and generate 176Wh (minimum rated capacity)
- Digi-View will output battery capacity in the camera viewfinder
- Compatible for use with the IDX Battery Management System (BMS)
- Excellent discharge performance in cold temperatures down to -20°C
- Integrated 5-LED power status indicator
- Safe for unlimited carry-on air transportation under IATA/UN regulations
- Compatible with all ENDURA V-Mount chargers and accessories

## E-HL9S Features

The E-HL9S is a high quality battery pack which delivers the same capacity and high draw specification as the E-HL9. The E-HL9S is built for those users who do not require PowerLink, BMS or Digi-View functionality.

- 88Wh (minimum rated capacity) V-Mount Li-ion battery
- High current draw up to 10A/120W
- Highly durable & long-lasting Li-ion cell technology
- 500 life cycle expectancy
- Excellent discharge performance in cold temperatures down to -20°C
- Integrated 3-LED power status indicator
- Safe for unlimited carry-on air transportation under IATA/UN regulations
- Compatible with all ENDURA V-Mount chargers and accessories



### The High Definition Power Drain

IDX have recognised that the typical HD camera set up can require a multitude of add-ons and accessories. In addition to a typical 40W-50W power consumption from the camera, operators who require a fully HD digital lens, on-board LED or Halogen light and wireless HD transmission link could be drawing in excess of 100W from the camera's battery supply.

Other battery models consistently placed under this sort of high load would result in damage to the battery cells and a significantly reduced lifespan and capacity. However, the E-HL9 and E-HL9S

this level of power drain on a day-to-day basis.



#### E-HL9

#### Advanced Battery Features

#### PowerLink

The E-HL9 model incorporates the distinctive IDX PowerLink feature. PowerLink is completely unique to IDX, and allows users to double the available capacity, including the ability to hot-swap or add a second E-HL9 battery at any time for continuous shooting. PowerLink can double the capacity of an E-HL9 battery to at least 176Wh by simply connecting together two E-HL9's at the rear of the camera. PowerLink offers a significant advantage

by providing an extended runtime, saving valuable time otherwise spent replacing the battery on a long shoot.



#### E-HL9

#### Performance in Cold Temperatures

The E-HL9 and E-HL9S are designed to operate in all conditions, but they excel when used in cold weather temperatures. Even in temperatures down to -20°C, the E-HL9 and E-HL9S can be used without experiencing the sharp voltage drop-off that affects many other battery models in this environment.

#### **Digi-View Data**

The Digi-View function on the E-HL9 enables battery data to be passed through to the camera viewfinder for an accurate indication of the battery's remaining capacity. In addition, an integrated 5-LED display is located on the side of the E-HL9 for a quick and accurate indication of remaining capacity. This is displayed in increments of 20% plus the last 10% and can be checked during filming or at any time. For the E-HL9S, an integrated 3-LED display is available to check if the battery is empty, full or requires charge.

#### Battery Management System

The E-HL9 is compatible with IDX's Battery Management System (BMS). BMS is a battery monitoring and diagnostic tool, ideal for any broadcast operation using or managing a fleet of E-HL9 batteries on a frequent basis. Key performance data such as the number of cycles, current capacity and discharge record is stored via the E-HL9's in-built microprocessor, which can be downloaded to a PC database where the data can be monitored to ensure the optimum battery is taken to location.

#### Quality and Safety Unsurpassed

The reliability and durability of the E-HL9 and E-HL9S is testament to the way both products are manufactured. Naturally they use only the highest grade Li-ion cells, but there are also numerous safety and control measures on board the internal PCB. These include protection from over charge, over discharge, over current, reverse charge and thermal exposure from high temperatures. Furthermore, a Mylar sheet maintains a safe and positive insulation between the PCB and Li-ion cells, while the cell assembly is held securely in position to the outer casing by vertical ribs and glued to cushioned padding.

#### Unrestricted for Air Transportation

One of our major philosophies towards battery development is that they should be easy to transport and usable in any location. Both the E-HL9 and E-HL9S are 88Wh in capacity, which comfortably falls below the 100Wh limit set by the International Air Transport Association (IATA) for Li-ion batteries. This allows you to travel with an unlimited number of spare batteries, provided they are correctly packaged and transported in your carry-on baggage. For further clarification on IATA and the air transportation of Li-ion batteries please visit www.idx.tv



## Technical Specification:

## E-HL9

## E-HL9S

Battery Capacity:	14.4V, 6.15Ah, 88Wh*	14.4V, 6.15Ah, 88Wh*
Max. Output Voltage:	16.8V DC	16.8V DC
Nominal Voltage:	14.4V DC	14.4V DC
End Voltage:	12V	12V
Maximum Discharge Load:	10A / 120W	10A / 120W
Battery Protection:	Reverse charge	Reverse charge
	Over charge (reset)	Over charge (reset)
	Over discharge (reset)	Over discharge (reset)
	Over current (reset)	Over current (reset)
	Temperature protection (non reset)	Temperature protection (non reset)
Ambient Temperature:	To charge: 0°C ~ 40°C	To charge: 0°C ~ 40°C
	(10°C ~ 30°C recommended)	(10°C ~ 30°C recommended)
	To discharge: -20°C ~ 45°C	To discharge: -20°C ~ 45°C
	(10°C ~ 40°C recommended)	(10°C ~ 40°C recommended)
	To store: -20°C ~ 60°C	To store: -20°C ~ 60°C
	(0°C ~ 20°C recommended)	(0°C ~ 20°C recommended)
Dimensions:	85(W) × 140(H) × 58(D) mm	85(W) x 142(H) x 50(D) mm
Weight:	740g approx.	720g approx.

\*IDX measures capacity of Li-ion batteries as a minimum capacity. Please visit our website for new and additional product information www.idx.tv IDX reserves the right to change the specifications contained herein without notice.

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