

# Marine Technologies | Battery Pack - 4000-297

## RECHARGEABLE LITHIUM-ION BATTERY PACK

The 4000-297 Battery Pack is custom-designed for non-magnetic, rechargeable performance and couples mechanically and electrically with DigiFIN®, DigiBIRD®, Speedlog and Velocimeter towed-streamer products, providing the user with an alternative power source for their existing fleet of model 5000 devices.



### BENEFITS

- Ability to always start surveys with completely charged batteries
- Eliminate the issues associated with shipping and storing conventional lithium primary batteries
- Lower HSE risk
- Can be charged while in the device via a newly-developed nose assembly

### FEATURES

- Designed to meet exacting performance and safety requirements
- Additional charge connector on opposite end of battery pack
- Easily distinguishable from other Lithium primary batteries by its blue color, its labeling, and the additional charge connector
- Charging system has a provision to prevent unintentional installation of a conventional lithium battery pack. The charge connector is electrically and physically different

### SPECIFICATIONS

Cell Chemistry  
 Configuration  
 Capacity  
 Safety

Lithium-ion (Lithium Cobalt Oxide)  
 Single Bank A  
 7.2V at 26.0 Ah, 188 Wh per pack ~ 37% of SLB-150

- Overvoltage Protection (OVP)
- Undervoltage Protection (UVP)
- Overcurrent Protection (OCP)
- Secondary Protection Fuse
- Thermal Cutoff (TCO)
- Complete Battery Management System (BMS)
- UN/DOT UN38.3 Certified

~ 9 -10 hours  
 Operating: Discharge: -4°C to +40°C  
 Operating: Charging: 0°C to +45°C  
 Storage: 20°C to +55°C

Charge Time  
 Temperature Range:  
*(Battery Pack alone)*

## BATTERY PACK NOMINAL DIMENSIONS

Diameter	4.69 cm (1.845 in.)
Length	34.26 cm (13.49 in.) incl. connectors
Weight	2.36lbs +/- 0.3 lbs

## ORDER INFORMATION

Rechargeable Battery Pack	4000-297
Rechargeable Battery Pack 5000 Nose Forward End Cap Assembly	8000-3126
Note: 8000-3126 is required; it is NOT an option	
Can NOT use the existing 5000 red nose assy	
Battery Charger Lithium-ion 8.4V, 4A, 90-264VAC (Interior)	4000-305
Battery Charger IP67 Lithium-ion 8.4V, 4A, 90-264VAC (Exterior)	4000-307

## REFERENCE DOCUMENTATION

0050-756	Service Diagram Nose End Cap Rechargeable 5000
0050-757	Service Diagram Rechargeable Battery 5000 4000-297
1050-1814	Manual Rechargeable Batteries and Charger



## BATTERY CHARGER SPECIFICATIONS

### Description

Model 4000-305

Model 4000-307

AC Input Voltage Rating

AC Input Current Rating

### Safety

Charge Voltage

Charge Current

Charge Status Indicator

Operating Temperature

Storage Temperature

Supplied Accessories

Switch mode charger with universal input voltage, 3 step charge control with current detection as charge termination

For Indoor Use Only

IP67 Rated for Exterior Use

90-264VAC, 47 - 63 Hz, Single Phase

- The rated maximum input current of 1.6 Amps on the 4000-305 Battery Charger is “worst case”, which is the maximum input current at the lowest rated input voltage (= @100VAC).
- At 240VAC, 50Hz the typical 4000-305 Battery Charger is maximum input current is 0.67 Amps.
- So a 240VAC, 50Hz 13 Amp mains branch should theoretically be able to support  $13/0.67 = 19$  Chargers
- Protected against reverse polarity and short circuit
- UL and CE Rated

8.4V ± 0.1V

4 Amp ± 0.2A

Three Color LED:

- Orange = Fast Charge, Constant Current Mode
- Yellow = Constant Voltage Mode; Current Decreases Until Charge Termination Level
- Green = Charge Complete; No Current Flows to the Battery.

-25°C to +40°C

-25°C to +85°C

4000-305 (Interior)

- 6 ft. IEC 320-C7 x 2 AC Input Power Cable (USA)
- Other power cords could be made available.
- (1) Mounting Bracket and Hardware Kit

4000-307 (IP67)

- Supplied with integral 12 ft. AC Pigtail for Customer Termination
- (1) Mounting Bracket and Hardware Kit

### About ION

ION has been a technology leader for 50 years with a strong history of innovation. Leveraging innovative technologies, ION creates value through data capture, analysis and optimization to enhance companies' critical decision-making abilities and returns. Our offerings are focused on improving E&P decision-making, enhancing reservoir management and optimizing offshore operations.