

## BATTERY PACK HW

Rechargeable Smart Battery Pack Li-Ion  
 14.40V / 3450 mAh / 49.7 Wh  
 REF 60402



### Features

- Worldwide approvals and certification of safety standards
- Smart batteries with numerous features according to the SMBus specification
- Integrated LED State of Charge (SoC) indicator
- State-of-the-art lithium-ion cells with the market’s highest energy density
- High discharge performance
- JEITA charging profile optimization
- Numerous and redundant safety features, e.g.:
  - CUV (Cell Under Voltage): protection against deep discharge
  - COV (Cell Over Voltage): protection against over charge
  - OTC (Over Temperature in Charge): protection against overheating while charging
  - OTD (Over Temperature in Discharge): protection against overheating during discharging
  - Life-End-Control: protection against rapid cell ageing
- Increased ESD protection up to 8kV
- SHA-1 cryptosystem to prevent plagiarism

### Intended Use:

This battery pack is a component of the ViVi® System, to be used by healthcare professionals to supply surgical helmets with low voltage DC power.

## Specification

General	
Delivery status battery capacity	30%
Compliance information	CE / UL2054 / FCC / PSE / KC / Gost / EAC / CQC / RCM / IEC62133 / UN38.3 / RoHS / REACH / BIS / TISI / BSMI
Operating temperature	0°C to 45°C (charge) -20°C to 60°C (discharge)
Storage temperature	-20°C to 50°C max. -20°C to 25°C recommended

Electrical Parameters	
Nominal voltage	14.40V
Nominal capacity	3450 mAh
Initial impedance	<180mΩ @ 1kHz at 25°C
Max. charge current	2.415A
Max. charge voltage	16.80V
Max. discharge	5.00A
Life expectancy	300 cycles with ≥ 75% of initial capacity CC/CV Charge: 1.675A / 16.80V Discharge: 3.35A down to 10.00V @ 25°C


Battery Dimensions	
Length	85.1mm +0.25/-0.25
Width	77.4mm +0.25/-0.25
Thickness	22.4mm +0.60/-0.40
Weight	230g
Contacts	+, D, C, T, -

Safety Parameters PCM	
Overcharge detection voltage / cell	4.23V
Overdischarge detection voltage / cell	2.50V
Overcharge detection current	3.35A
Overdischarge detection current	5.50A

Run-time with ViVi® System	
REF 80100 ViVi Helmet	≥ 6 hours typical (maximum fanspeed)
REF 80120 ViVi Helmet w/ Headlight	≥ 3¾ hours typical (LED on, maximum fanspeed)

Recharging	
With REF 60501 Single-Bay Smart Charger	≤ 2½ hours (typical)

For use with	
Charging:	REF 60501 Single-Bay Smart Charger
Powering Helmets using:	REF 60403 Battery Holster HW

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