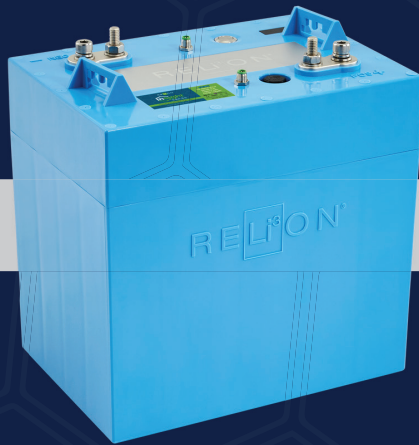


RELi<sup>3</sup>ON®

insight  
SERIES®



LiFePO4

## INTELLIGENT FEATURES

### Smart Parallel Connections

- Intelligent battery-to-battery balancing
- Self latching with tough safe chargers
- Easy battery swap installation
- Scale up to 10 batteries in parallel

### Low Temperature Operation

- Can charge at operations down to -20°C (-4°F)

### Heatsink Design

- Strategically located
- Unique passive cooling

### Dual M8 Terminals (Insert and Stud)

- Ample space for connections

### LED Indicator

- Provides State of Charge (SOC)

### Unique BMS Design

- Microcontroller-based design
- Smart low voltage recovery mode
- Solid State Switch for ultra-fast response times
- High-resolution internal measurements
- Non-volatile historical data
- CANbus communication
- Sleep mode capability

## MODEL

Part Number	48V030-GC2-LT
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## FUNCTIONAL SPECIFICATIONS

Nominal Voltage	51.2V
Cell Chemistry	LiFePO4
Cell Type	Prismatic
Ampere-hour Capacity	30Ah
Watt-hour Capacity	1.536kWh
Specific Energy	128Wh/kg
Impedance (50% SOC, 1kHz)	<150mΩ
Cycles @ 80% DOD	>3500
Parallel Capable	Yes (up to 10)
Series Capable	No

## MECHANICAL SPECIFICATIONS

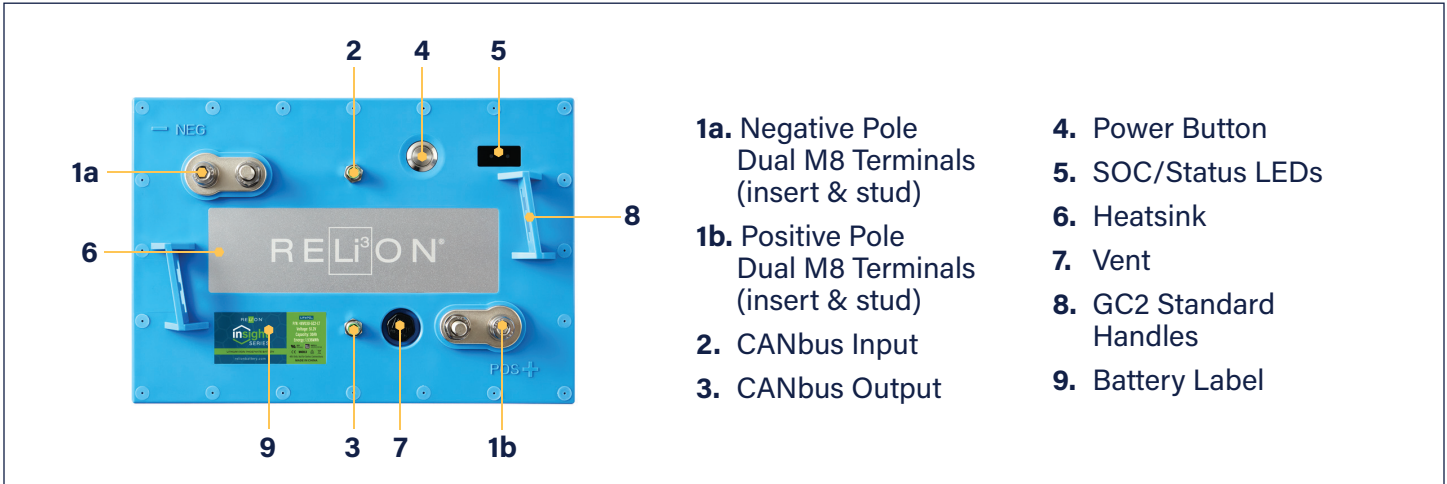
BCI Size	GC2 / GC8
Dimensions (LxWxH)	260 x 180 x 276 mm (10.2 x 7.1 x 10.9 in)
Weight	15.6 kg (34.4 lbs)
Case Material	ABS
Stud / Insert Terminal	M8 X 1.25 - 20
Ingress Protection Marking	IP67
Case Flame Rating	UL94 V-0

## DISCHARGE SPECIFICATIONS

Continuous Discharge Current	45A (1.5C)
Peak Discharge Current	90A @ 25°C, 8min (3C)
Peak Over Current	100A<I <sub>batt</sub> <150A 10s 150A<I <sub>batt</sub> <180A 2s 180A<I <sub>batt</sub> <250A 1s
Short-Circuit Protection	350A, 200μs
Short-Circuit Reset	Automatic
Discharge Cut-Off Voltage	2.5V/cell for 5s (40V)
Under-Voltage Reset	Automatically above 2.7V/cell (43.2V)
Pulse Recovery Operation	Automatically activated under 2.5V/cell
Permanent Off Voltage	1.8V/cell (28.8V) ~6 months @ 25°C (60°F)

## CHARGE SPECIFICATIONS

Recommended Charge Current	15A (0.5C)
Continuous Charge Current	≤ 30A (1C)
Disconnect Charge Current	30A≤I <sub>batt</sub> <50A, 5s
Peak Charge Voltage	57V
Float Voltage	54V
Over-Voltage Protection	3.65V/cell 4s (58.4V)
Over-Voltage Reset	Automatically at 3.6V/cell (57.6V)
Heating Rate	20°C/hr (35°F/hr)



### ENVIRONMENTAL SPECIFICATIONS

Charge Under Temperature	-20°C (-4°F) for 2s. Self-heating function will be activated below 0°C. Self-reset function.
Charge Over Temperature	55°C (131°F) for 2s Self-reset function.
Discharge Under Temperature	-20°C (-4°F) for 2s Self-reset function.
Discharge Over Temperature	55°C (131°F) for 2s Self-reset function.
Operating Humidity Range	10% to 95% RH non-condensing
Optimal Storage Temperature	10°C to 35°C (50°F to 95°F)
Optimal Storage Humidity	15% to 90% RH

### CERTIFICATIONS

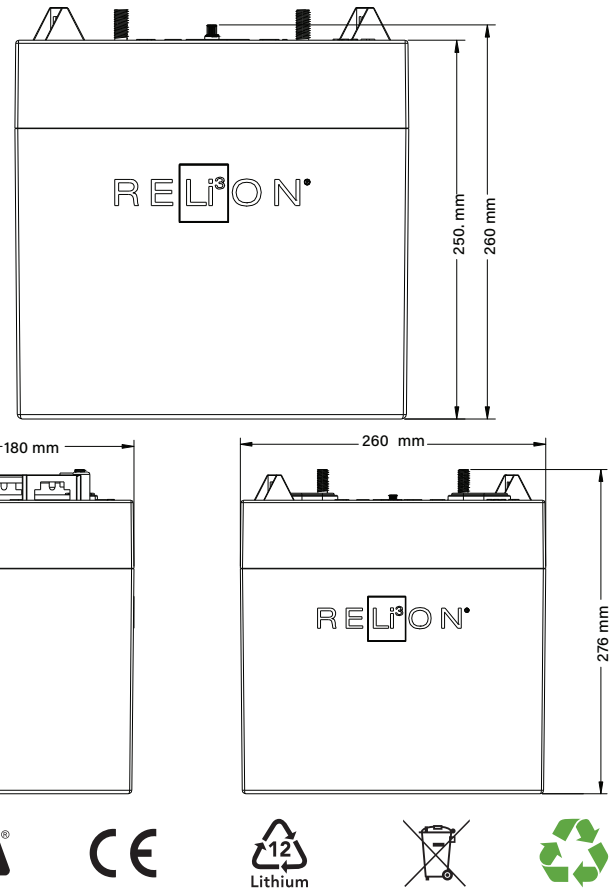
UL2580 pending (Cell)
UL2271 pending (Battery Pack)
CE (Battery Pack)
IEC 62133-2 :2017 (Lithium Batteries)

### SHIPPING CLASSIFICATION

UN3480, Class 9
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### APPLICATIONS

- Golf Cars
- Personal Transportation Vehicles (PTVs)
- Utility Vehicles
- Low Speed Vehicles (LSVs)
- Automated Guided Vehicles (AGVs)
- Solar



### COMPATIBLE ACCESSORIES

InSight 24V and 48V Fuel Gauge - BI-3140R-2448
InSight Remote Power Switch - RS-GC2-03 / RS-GC2-06 / RS-GC2-10
CAN Termination Resistor Assembly - CAN-TR
More on our website <a href="http://www.relionbattery.com">www.relionbattery.com</a>