





LiFePO4

INTELLIGENT FEATURES

Smart Parallel Connections

- Intelligent battery-to-battery balancing
- Self latching with touch 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



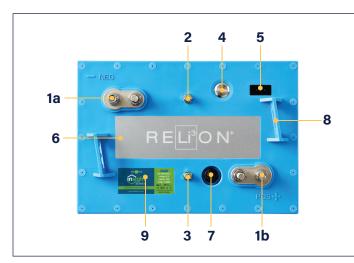
MODEL	
Part Number	48V030-GC2-LT

FUNCTIONAL SPECIFICATIONS		
Nominal Voltage	51.2V	
Cell Chemistry	LiFePO4	
Cell Type	Prismatic	
Ampere-hour Capacity	30Ah	
Watthour Capacity	1536Wh	
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		
Recommended Continuous Discharge Current	45A (1.5C)	
Maximum Continuos Discharge Current	100A	
Peak Over Current	100A <lbatt<150a, 10s<br="">150A<lbatt<180a, 5s<br="">180A<lbatt<250a, 2s<br="">Ibatt>250A, 0.5s</lbatt<250a,></lbatt<180a,></lbatt<150a,>	
Short-Circuit Protection	>350A	
Short-Circuit Reset	Automatic	
Discharge Cut Off Pulse Recovery Operation	Automatically above 2.9V/cell (46.4V)	
Low Voltage Protection	2.8V/cell (44.8V) ~6 months @ 25°C (60°F)	
Permanent Off Voltage	1.8V/cell (28.8V)	

CHARGE SPECIFICATIONS		
Recommended Charge Current	15A (0.5C)	
Continuous Charge Current	≤ 30A (1C)	
Disconnect Charge Current	Ibatt>30A, 5s Ibatt> 50A, 0.5s	
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)	



- **1a.** Negative Pole Dual M8 Terminals (insert & stud)
- **1b.** Positive Pole Dual M8 Terminals (insert & stud)
- 2. CANbus Input
- 3. CANbus Output

- 4. Power Button
- 5. SOC/Status LEDs
- 6. Heatsink
- 7. Vent
- 8. GC2 Standard Handles
- 9. Battery Label

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)	

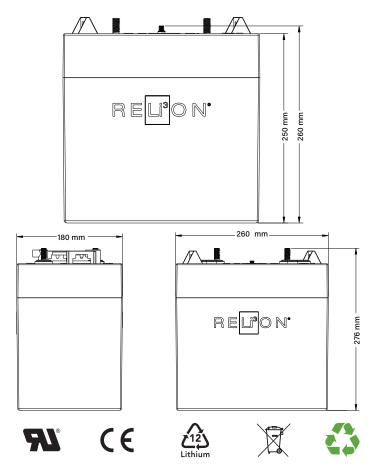
SHIPPING CLASSIFICATION

UN3480, Class 9

Solar

APPLICATIONS

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



COMPATIBLE ACCESSORIES

InSight 24V and 48V Fuel Gauge - BI-3140R-2448

In Sight Remote Power Switch - RS-GC2-03 / RS-GC2-06 / RS-GC2-10

CAN Termination Resistor Assembly - CAN-TR

More on our website www.relionbattery.com