

# RELi<sup>3</sup>ON<sup>®</sup>

## insight SERIES



LiFePO4

### INTELLIGENT FEATURES

#### Up to 128 Parallel Connections

- Intelligent battery-to-battery balancing
- Additive continuous and peak currents
- No additional hardware needed

#### Heatsink Design

- Strategically located
- Unique passive cooling
- Prevents over-heating of critical components

#### Dual M8 Terminals (insert and Stud)

- Ample space for connections

#### LED Indicator

- Provides State of Charge (SOC)

#### Unique BMS Design

- Microcontroller-based design
- Innovative protection algorithms
- MOSFET-based for ultra-fast response times
- High-resolution internal measurements
- Ultra-low self-consumption
- Non-volatile historical data
- CANbus communication

RELi<sup>3</sup>ON<sup>®</sup>

DATA SHEET

#### MODEL

Part Number	12V120-GC2-001
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#### FUNCTIONAL SPECIFICATIONS

Nominal Voltage	12.8V
Cell Chemistry	LiFePO4
Cell Type	Prismatic
Ampere-hour Capacity	120Ah
Watt-hour Capacity	1.536kWh
Specific Energy	128Wh/kg
Charge Efficiency	99%
Impedance (50% SOC, 1kHz)	<100mΩ
Cycles @ 80% DOD	>6000

#### MECHANICAL SPECIFICATIONS

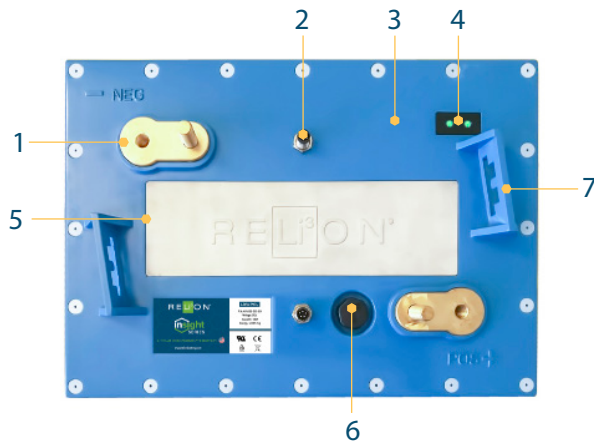
BCI Size	GC2
Dimensions (LxWxH)	260 x 180 x 276 mm
Weight	26.4 lbs (12 kg)
Case Material	ABS
Stud Terminal	M8 X 1.25 - 20
Insert Terminal	M8 X 1.25 - 20
Handles	Molded
Ingress Protection Marking	IP67
Case Flame Rating	UL94 V-0

#### DISCHARGE SPECIFICATIONS

Continuous Discharge Current	200A
Discharge Current (30-sec)	300A
Max Discharge Current (10-sec)	350A
Short Circuit Protection	1000A
Low Voltage Disconnect	10V (5s)
Low Voltage Reconnect	Reset & Charge
Self-Discharge per Month @ 25°C	Idle 1.2%, Sleep 0.12%

#### CHARGE SPECIFICATIONS

Continuous Charge Current	120A
Max Charge Voltage	14.6V
Recommended Charge Voltage	14V
Float Voltage	13.8V
High Voltage Disconnect	15.2V (4s)
High Voltage Reconnect	Automatic
Temperature Compensation	None



- 1. Dual M8 Terminals (insert & stud)
- 2. CANbus Input/Output
- 3. Wake-Up Button
- 4. SOC/Status LEDs
- 5. Heatsink
- 6. Vent
- 7. Lifting Brackets

**ENVIRONMENTAL SPECIFICATIONS**

*Charge Temperature	-20°C to 45°C
Discharge Temperature	-20°C to +60°C
Operating Humidity	<90% RH
Storage Temperature	-40°C to +60°C
Storage Humidity	25 to 85% RH

\*For charging below 0°C see Charging Instructions

**CERTIFICATIONS**

- UL2580 (Cell)
- UL2271 (Battery Pack)
- CE (Battery Pack)
- UN 38.3 (Battery Pack)

**APPLICATIONS**

Traction and Stationary Including:  
 Floor Machines  
 AWP  
 Marine  
 RV  
 Solar  
 Auxilliary Power

**SHIPPING CERTIFICATIONS**

UN 3480, Class 9

