RELi3ON®

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

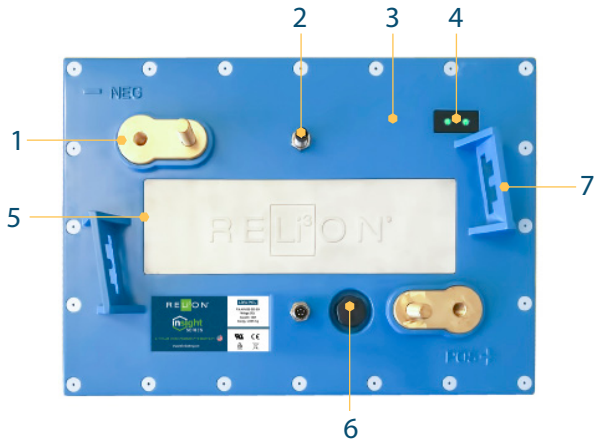
MODEL	
Part Number	12V120-GC2-001

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

MECHANICAL SPECIFICATIONS	
BCI Size	GC2
Dimmensions (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

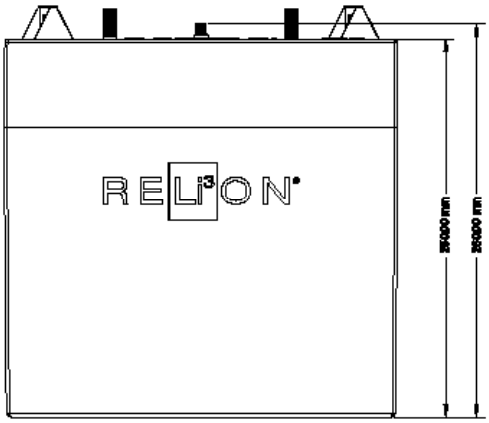


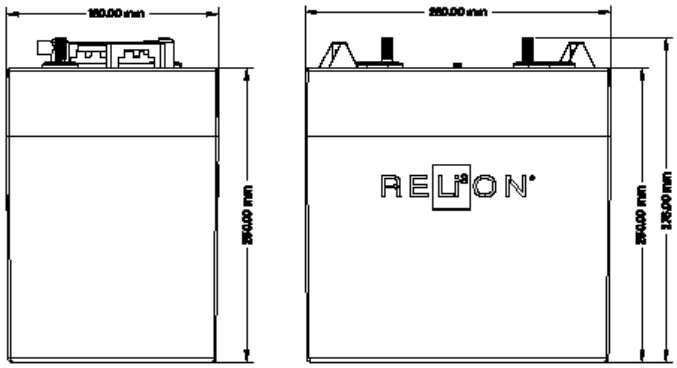
1. Dual M8 Terminals (insert & stud)
2. CANbus Input/Output
3. Wake-Up Button
4. SOC/Status LEDs
5. Heatsink
6. Vent
7. Lifting Brackets

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

UL UN38.3
PENDING

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