

# RELi<sup>3</sup>ON<sup>®</sup>

## insight<sup>™</sup> SERIES



LiFePO4

### INTELLIGENT FEATURES

#### Unlimited Parallel Connections

- Intelligent battery-to-battery balancing
- Additive continuous and peak currents
- Scale as needed

#### Low Temperature Operation

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

#### 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
- Intuitive software
- Solid State Switch for ultra-fast response times
- High-resolution internal measurements
- Non-volatile historical data
- CANbus communication
- Sleep mode capability

RELi<sup>3</sup>ON<sup>®</sup> | DATA SHEET

### MODEL

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

Nominal Voltage	12.8V
Cell Chemistry	LiFePO4
Cell Type	Prismatic
Ampere-hour Capacity	120 Ah
Watt-hour Capacity	1.536kWh
Specific Energy	128Wh/kg
Charge Efficiency	99%
Impedance (50% SOC, 1kHz)	<100mΩ
Cycles @ 80% DOD	>3500
Parallel Capable	Yes (unlimited)
Series Capable	No (max 12V system)

### MECHANICAL SPECIFICATIONS

BCI Size	GC2 / GC8
Dimensions (LxDxH)	10.2 x 7.1 x 10.9 in (260 x 180 x 276 mm)
Weight	34.4 lbs (15.6 kg)
Case Material	ABS
Stud Terminal	M8 X 1.25 - 20
Insert Terminal	M8 X 1.25 - 20
Torque	79.7-88.5 in.-lbs. 6.6-7.4 ft.-lbs. 9-10 N-m
Handles	Molded
Ingress Protection Marking	IP67
Case Flame Rating	UL94 V-0

### DISCHARGE SPECIFICATIONS

Continuous Discharge Current	160A
Peak Discharge Current - 1	175A - 5 min
Peak Discharge Current - 2	250A - 2 min
Peak Discharge Current - 3	350A - 15 sec
Peak Discharge Current - 4	400A - 5 sec
Short Circuit Protection	3000A - 300 μsec
Protection Recover	Automatic
Low Voltage Disconnect	10V - 5 sec (2.5vpc)
Low Voltage Reconnect	Automatic
Self-Discharge per Month @ 25°C in OFF mode	2.80%

### CHARGE SPECIFICATIONS

Recommended Charging Current	10-60A
Disconnect Charge Current - 1	100A
Disconnect Charge Current - 2	120A - 0.5 sec
Recommended Charge Voltage	14.4-14.6V
Float Voltage	13.8V
High Voltage Disconnect	14.8V -4 sec (3.7vpc)
High Voltage Reconnect	Automatic
Temperature Compensation	None
Heating Element Power	50W
Heating Rate	5°C/hr



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

### ENVIRONMENTAL SPECIFICATIONS

Charge Temperature	32°F to 113°F (0°C to 45°C)
Discharge Temperature	-4°F to 149°F (-20°C to 65°C)
Operating Humidity	<90% RH
Storage Temperature	50°F to 95°F (10°C to 35°C)
Storage Humidity	25 to 85% RH

### CERTIFICATIONS

UL1973 (Battery Pack) File Number: PENDING
CE (Battery Pack)
IEC 62133 (Battery Pack) PENDING
UN38.3 (Battery Pack)

### SHIPPING CLASSIFICATION

UN 3480, Class 9
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### APPLICATIONS

Recreational Vehicles
Marine

### COMPATIBLE ACCESSORIES

InSight Remote Button
InSight Fuel Gauge (CANbus)

