

Magic Battery Pack **12V 105Ah**

MECHANICAL SPECIFICATIONS

MODEL	BCI	DIMENSIONS INCHES (MM)			WEIGHT LBS.(KG)	CASE MATERIAL	TERMINAL TYPE	TORQUE	IP Rating	CASE FLAME RATING
12V105-GC2	GC2	LENGTH	WIDTH	HEIGHT	24(11kg)	ABS	M8 X 1.25-D10	9-10 N-m	IP67	UL94 V-0
		10.2(260)	7.1(180)	10.8(276)						

BASIC SPECIFICATIONS

FUNCTION DESCRIPTION	
Nominal Voltage	12.8V
Cell Chemistry	LiFePO4
Cell Type	Prismatic
Ampere-hour Capacity	105Ah
Watt-hour Capacity	1.344kWh
Charge Efficiency	99%
Impedance (50% SOC, 1kHz)	<4.5mΩ
Cycles @ 70% DOD	>3000
Parallel Connection	Up to 20 (105Ah-2100Ah)
Serial Connection	Up to 8 (12.8V-102.4V)

DISCHARGE SPECIFICATIONS

EMISSION INSTRUCTIONS	
Continuous Discharge Current	105A
Peak Discharge Current	200A - 300s
Peak Discharge Current	250A - 180s
Short Circuit Protection	600A - 500us, no automatic restart
Low Voltage Reconnect	Automatic
Self-Discharge per Month @ 25°C in OFF mode	2.80%

ENVIRONMENTAL SPECIFICATIONS

Charge Temperature	32°F~140°F (0°C~60°C)
Discharge Temperature	-22°F~140°F (-30°C~60°C)

OTHER SPECIFICATIONS

OTHER DESCRIPTION	
Battery Internal Protection	Short Circuit Current Temperature Over Voltage Under Voltage Over-current
Battery Functions	Cell Balancing, State Of Charge, CAN
Safety Systems	Fuse, Hardware, BMS
Shipping Classification	UN3480, Class 9

CHARGE SPECIFICATIONS

ONLY FOR ONE 12V105-GC2

		MAXIMUM CHARGING CURRENT					
TEMP	SOC	<10%	10%~40%	40%~80%	80%~90%	90%~95%	95%~100%
	(0.2]		0.2C	0.1C	0.1C	0.1C	0.06C
(.2,7]		0.4C	0.2C	0.2C	0.2C	0.12C	0.12C
(.7,10]		0.8C	0.6C	0.4C	0.2C	0.2C	0.12C
(10,50]		1C	1C	1C	1C	0.8C	0.4C

1. Series connection increases the voltage, the maximum discharge current remains the same.
2. Parallel connection increases the capacity and also increases the maximum discharge current.

**DROP
IN READY**
Standard BCI GC2 Size



Flexible Combination

Supports multiple batteries in parallel or (and) series, up to 102V or 2100Ah



Super Safety

Smart BMS provides multi-protection



Intelligent Management

Advanced cell to cell battery to battery balancing design, Automatic fault diagnosis



Easy Connection

Dual M8 terminals
Customizable battery pack according to manual