











THE EXPERT OF LITHIUM

### LITHIUM ION BATTERY DATASHEET



### **AVAILABLE IN:**

# 105AH **72V**

LiFePo4 Battery Drop-in Replacement















### A BETTER BATTERY WITH MORE POWER IN LESS SPACE

**B**NT Lithium Ion Iron Phosphate (LiFePO ) battery uses certified cells. Equipped with redundant safety features, the BNT lithium battery is the safest in the market today. Specifically designed to withstand the harsh operating environments of marine and vehicle applications, the BNT lithium battery lasts up to 3500 cycles compared to a traditional lead acid or AGM battery, which typically lasts 400-500 cycles.

**B**NT range features a Lithium Phosphate(LiFe PO4) battery constructed utilising individual 3.2V3200mAh cells in series and parallel. These Lithium cells are controlled by the BNT Battery Management System (BMS). Customised BMS allows the BNT battery to perform safely without the fear of thermal runaway and explosion. Another crucial feature of the BNT BMS is to equalise all individual Lithium cells in the battery ensuring longevity.

Customisation ensures the BNT battery range can be retrofitted into a range of space restrictive areas. Thanks to the BNT ranges flexibility .The BNT lithium battery offers exceptional power density and is also available with a heating blanket option if installation is outside the main cabin. With the Bluetooth connection enabled gathering real time data from the battery is incredibly simple and always accurate.

## **≡** FEATURES



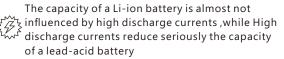
Internal BMS-BMS keeps track of battery's health parameters, thermal management and charging

Cell Balancing - extends lifetime of battery

Zero Emission - Lithium-ion batteries have no emissions during charging

The energy density of Li-ion is very high, Long cycle life: 3500 cycles @ 80 %DOD





The Li-ion battery is much lighter than the conventional lead-acid battery, this can give an important saving in the construction and reduces the energy consumption for mobile system

The reduction of capacity for Li-ion batteries is much smaller what makes them very useful for low temperature operations







**TOP View** 

Side View











.Connect With Bluetooth .Monitor Battery











### On /Off Board Charger

BNT products are lithium-ion battery packs with integrated golf cart battery system.

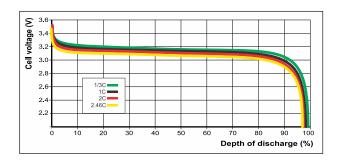
They are designed to replace the lead-acid batteries and are available for drop-in replacement in Club Car, EZ-GO, Yamaha, StarEV, Tomberlin., etc, vehicles easily.

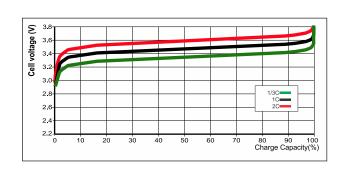
The casing of a battery charger shall have the strength and rigidity necessary to resist the abuses to which it may be subjected, without resulting in a risk of fire. The casing of a user-replaceable battery charger shall have the strength and rigidity necessary to resist the abuses to which it may be subjected without resulting in a risk of injury to persons.



#### **Charger Specifications**

Battery pack rated voltage	72V	
Maximum charger output	92V	
AC input voltage range	85-270VAC; 45-65Hz	
AC input current value	11.5A@120VAC; 6.1A@220VAC	
Power factor	≥0.99	
Charger efficiency	≥95%	
Noise	≤45dB	
IP Class	lp67	
Weight	9.3lb(4.2kg)	
Operating temperature	-86°F to 149°F(-30°C to 65°C)	
Storage temperature	-104°F to 203°F(-40°C to 95°C)	







#### **BATTERY SPECIFICATION**

Model	BNT-G72105
Nominal Voltage	72V
Nominal Capacity	105AH
Stored Energy	7.56KWH
Life Cycles	>3500 Times
Self Discharge	Max 3.2% Per Month
Continuous Charge Current	≤70A
Continuous Discharge Current	100A
Maximum Discharge Current	3C (30S)
Quick Charge Time	2-3h
Standard Charge Time	4-5h
ENVIRONMENTAL	
Charge Temperature Range	32°F-113 °F (0°C -45°C)
Discharge Temperature Range	-4°F-140°F (-20°C-60°C)
Storange Temperature Range	-14°F-95°F (-10°C -35°C)
MECHANICAL	
Cell Circuit Pattern	23 cells in series
Cell Assembly	3.2V 105AH
Battery Body Material	Metal+Powder Coating
Battery Body Material Weight	Metal+Powder Coating 160 LBS(72.5KG)
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BNT products are lithium-ion battery packs with integrated golf cart battery system. They are designed to replace the lead-acid batteries and are available for drop-in replacement in Club Car, EZ-GO, Yamaha.,etc, vehicles easily.

The design life of the golf cart batteries is 15 years and we offer a five-year warranty. BNT batteries can save up to at least 70% expenditures for you in five years .

