



GOLF CART



FORK LIFT



SCISSOR LIFT



PORTABLE  
POWER



POWER  
STORAGE

## APPLICATIONS



**BNT**  
BATTERY

THE EXPERT OF LITHIUM

# LITHIUM ION BATTERY DATASHEET



5 YEARS ★  
WARRANTY

AVAILABLE IN :

**450AH**

**48V**

LiFePo4 Battery  
Drop-in Replacement



Zero Maintenance



Long Life Span



Light Weight



High Performance



Max Power



No Emission



## A BETTER BATTERY WITH MORE POWER IN LESS SPACE


**BNT** Lithium Ion Iron Phosphate (LiFePO<sub>4</sub>) 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.

**BNT** range features a Lithium Phosphate (LiFe PO<sub>4</sub>) 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

 Fast Charging - No cool-down period required


 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

 Lithium-ion batteries have no memory effect

 The capacity of a Li-ion battery is almost not influenced by high discharge currents, while High discharge currents reduce seriously the capacity of a lead-acid battery

 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



Front View



TOP View



Side View



### BNT BATTERY MOBILE APP

.Connect With Bluetooth  
.Monitor Battery



# On /Off Board Charger

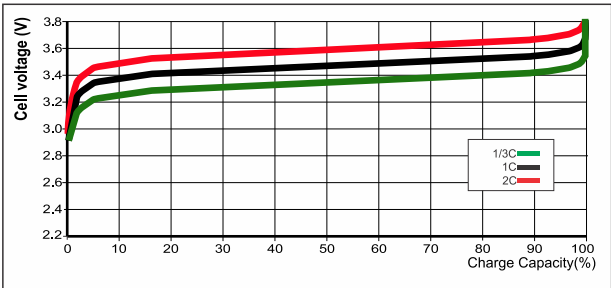
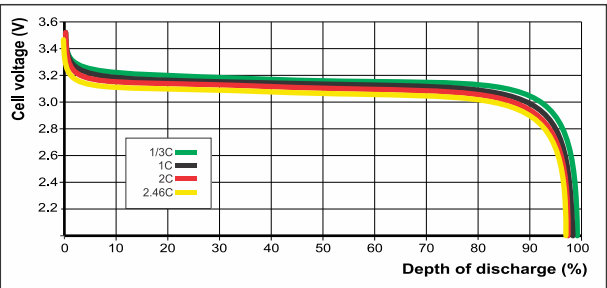
BNT has comprised basic kits for all the popular Foklift makes and models. Toyota,Yale,Linde,Heli .,etc. Centered around affordability and his good, better , best philosophy to repairs or modifications for your forkliftEasy Install: The BNT Lithium forklift Battery ,a direct replacement for many forklift batteries. This forklift battery package come with everything you need to make replacing your batteries the fastest and easiest install.

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	48V
Maximum charger output	68V
AC input voltage range	85-270VAC; 45-65Hz
AC input current value	16A@120VAC; 11A@220VAC
Power factor	≥0.99
Charger efficiency	≥95%
Noise	≤45dB
IP Class	Ip67
Weight	45.2lb(20.5kg)
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-F48450
Nominal Voltage	48V
Nominal Capacity	450AH
Stored Energy	21.6KWH
Life Cycles	>3500 Times
Self Discharge	Max 3.2% Per Month
Continuous Charge Current	100-200A
Continuous Discharge Current	500A
Maximum Discharge Current	3C (30S)
Quick Charge Time	1-2h
Standard Charge Time	2-3h

## ENVIRONMENTAL

Charge Temperature Range	32°F -131 °F (0°C -55°C)
Discharge Temperature Range	-4°F -140°F (-20°C -60°C)
Storage Temperature Range	32°F -95°F (0°C -35°C)

## MECHANICAL

Cell Circuit Pattern	16cells in series
Cell Assembly	3.2V 450AH
Battery Body Material	Metal+Powder Coating
Weight	926 LBS(420KG)
Dimension(L*W*H)	38.6 * 23.6 *30.7 inch
IP Class	IP 65

In the material handling industry, speed and productivity matter. Running an efficient operation means higher margins and happy customers. But, during an average shift, how much productivity is lost because employees have to service batteries or wait for a piece of equipment to charge up?

Lithium batteries eliminate the need for spare batteries and charging rooms. Save time and money by eliminating time spent on watering, cleaning and equalizing forklift batteries.

## CONTACT

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## CUSTOMER SERVICE

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Hours of operation:  
9:00am - 17:30 pm



LEARN MORE ON:  
[www.bntbattery.com](http://www.bntbattery.com)