



nyobolt

INDUSTRIAL

Lift Truck



24V/48V Module

Nyobolt is enhancing lift truck productivity with its fast-charging lithium-ion battery module for material handling equipment.

The state-of-the-art module integrates Nyobolt's advanced lithium-ion cell technology engineered for high-power performance.

This module, designed with cutting-edge thermal engineering, delivers fast-charge in minutes.



Nyobolt's fast-charging lift truck module enables lift truck fleets to:



Maximize lifts or moves per hour by reducing time spent out of service to minutes from hours



Decrease costs for 24/7 operations by reducing extra lift trucks or spare batteries by 15+%

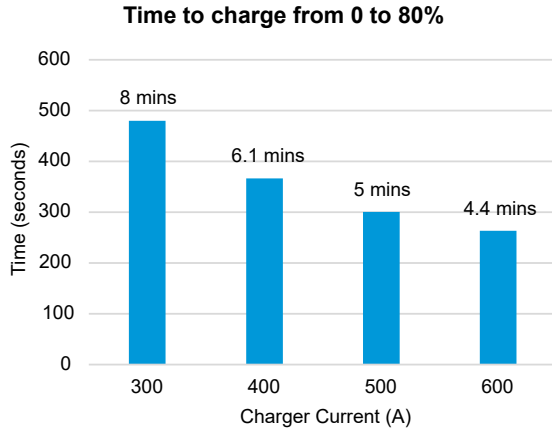


"Get-the-job-done mode:" Opportunity charge up to 50% of the battery's capacity in just 3 minutes

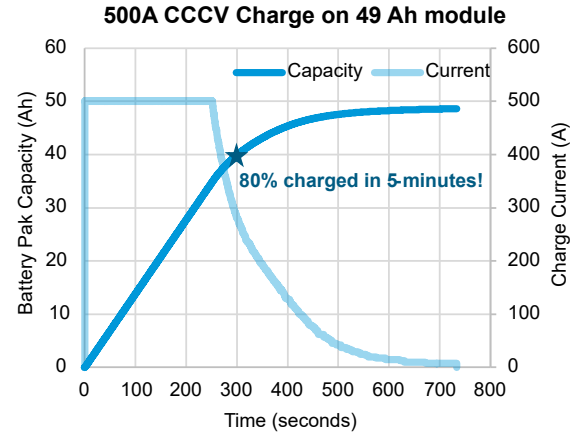


Expand productive warehouse floor space by eliminating the need for dedicated charging bays or rooms

Performance Data



Time to charge a 49 Ah module from 0 to 80% as a function of charger current



Current and capacity reported during a 500A constant current constant voltage charge on a 49 Ah module

Description	24V	48V
Nominal Voltage	25.9V	51.8V
Voltage Range	29.4V - 18.9V	59.8V - 37.8V
Rated Capacity / Energy	49Ah / 1.26kWh	49Ah / 2.53kWh
Max Cont. Charge	588A (12C)	588A (12C)
Max Cont. Discharge	490A (10C)	490A (10C)
Max Pulse Charge / Discharge	1470A (30C)	1470A (30C)
Operating Temperature	-10 to 60 °C	-10 to 60 °C
Cooling	Passive or Active (Water-glycol Cold plate)*	
Cycle Life	> 4000 charge-discharge cycles	
Dimensions	90 x 153 x 367 mm**	90 x 306 x 367 mm**
Weight (kg)	8.9 kg**	17.8 kg**
BMS Functions	SoC, SoP, and SoH Estimation, Passive Cell Balancing, Passive and Active Warnings and Faults, CAN communication	
Safety	UL2271, UL2580, and UN38.3 with dedicated BMS safety microcontroller conforming to ISO 26262 and ASIL-C	

*Dependent on duty cycle

**Customizable to Lift Truck with Truck Adaptor

Example Applications

Batteries can be sized for specific operational use-cases as multiple modules can be connected in parallel to match available charging infrastructure and minimum capacity requirements.

No. of Modules in Parallel in the Battery Pack	Battery Pack Capacity (Ah)	Battery Pack Charge Currents (A)			
1	49	588	294	196	147
2	98	1176	588	392	294
3	147	1764	882	588	441
4	196	2352	1176	784	588
5	245	2940	1470	980	735
6	294	3528	1764	1176	882
7	343	4116	2058	1372	1029
8	392	4704	2352	1568	1176
9	441	5292	2646	1764	1323
10	490	5880	2940	1960	1470
Time to full charge from 0 - 100%		5 min	10 min	15 min	20 min
Time to opportunity charge from 20 - 80%		3 min	6 min	9 min	12 min

Chargers available in the market; Grey - other Custom chargers can be developed by Nyobolt



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More power in less time

To find out more visit
www.nyobolt.com

Or contact us at
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