

48V Batteries

English



ADVANTAGES

High energy density for a longer lifespan in comparison to the battery size

Our lightweight batteries use the newest technology resulting in amazing weight reduction

Minimum dimensions make the battery compatible for all sorts of applications

All our batteries are **powerful** and reliable, creating extremely easy usability

Maintenance-free batteries, no service needed

Our products are user friendly and have an amazingly long lifespan

High discharge capacity to charge the batteries as fast as possible

Our batteries are offered with the most capacity for the **best price possible**



DATASHEET

Battery characteristics

Product name	48V 60Ah 48V 100Ah		48V 200Ah
Article code	300002631	300002632	300002633
Nominal voltage	51.2	51.2V	51.2
Nominal capacity	60 Ah	100 Ah	200 Ah

Battery dimensions

Weight	30 kg 50 kg		75 kg	
Dimensions (LxWxH)	34x33x26 cm 51x35x26 cm		60x42x24 cm	
Terminals	2x plus / 2x minus	2x plus / 2x minus	2x plus / 2x minus	
Terminal size	M10	M10	M10	
Impedance	<300 mΩ	<300 mΩ	<300 mΩ	

Battery specifications

Max. continues charge current	30 A 50 A		100A	
Max. continues discharge current	120 A 125 A		200 A	
Max. instantaneous discharge current	3C	3C	3C	
Maximum charge voltage	58.4 V	58.4 V 58.4 V		
Discharge cut-off voltage	35.2 V	35.2 V	35.2 V	
Handles	Yes	Yes	Yes	

Battery temperatures

Environment	Details	Minimum	Maximum	
	Charge	0°C	45°C	
Operating temperature	Discharge	-20°C	65°C	
Storage temperature	1 month	-20°C	60°C	
	3 months	-20°C	45°C	
	12 months	-20°C	20°C	

Discharge temp.	-20°C	-10°C	0°C	23°C	60°C
Discharge capacity	50%	60%	80%	100%	95%

MISSION

Offering excellent quality products, that is our mission. Convince our clients with lots of reliable running time with minimal maintenance intervals and a high user experience. If we succeed with this mission, we will succeed with our vision.

Offering affordable batteries without any consequences for quality

The durability, combined with no maintenance costs and affordable prices make this battery a perfect candidate for who wants to use an electric powerdrive. There are multiple technical advantages of a Battery Technology battery that make it a pleasure to use.

With our new generation LiFePO4-batteries we aim to make the use of batteries both easy and affordable.



Specificaties Battery Management System (BMS)

Each battery has an integrated Battery Management System (BMS). A BMS is the electronic system that manages a rechargeable battery such as by protecting the battery from operating outside its safe operating area, monitoring its state, calculating secondary data, reporting that data, controlling its environment, authenticating it, and balancing it.

Specifications	Details	48V 60Ah	48V 100Ah	48V 200Ah
Over charge protection	Detection voltage V]	3.7	3.7	3.7
	Detection delay time [ms]	200	200	200
	Release voltage [V]	3.5	3.5	3.5
Over discharge protection	Detection voltage [V]	2.3±0.1	2.3±0.1	2.3±0.1
	Release voltage [V]	2.7±0.1	2.7±0.1	2.7±0.1
Over current protection	Detection current [A]	300	360	600
	Detection delay time [ms]	150	150	150
	Release condition	Cut short circuit	Cut short circuit	Cut short circuit
Short protection	Protection condition	Exterior short circuit	Exterior short circuit	Exterior short circuit
	Release condition	Close short circuit	Close short circuit	Close short circuit

	Charging current normal range [A]	10-30	20-50	20-50
Over current protection (charging)	Protection condition [A]	>30	>50	>200
(cridiging)	Release condition	Disconnect charger	Disconnect charger	Disconnect charger
Overheat protection	Protection condition [°C]	75	75	75
	Release condition [°C]	65	65	65
Inside resistance	Main loop electrify resistor	$V_{gs} = 10V; R_{DS}$ $\leq 60m\Omega$	$V_{gs} = 10V; R_{DS}$ $\leq 60m\Omega$	$V_{gs} = 10V; R_{DS}$ $\leq 60m\Omega$
Consumption	Consumption normal operation [µA]	≤80	≤80	≤80



Automotive branche

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Energy storage

Custom applications

Battery Technology products are universal and easy to use for multiple applications. Our batteries are compatible for the **maritime** branche, the **automotive** industry and for **energy storage**. In addition, there are endless possibilities for **custom applications**. In consult with our team, there are multiple possibilities for any specific project to work.

Do not hesitate to contact us for the possibilities.

Complete package

At Battery Technology we offer a complete package to our customers. Next to batteries, we offer **compatible accessories** so that customers have access to a complete system. Chargers, fuses, cables, and monitors can all be included in the package.

In consult with our team, **anything** is possible with regards to custom applications.



Fuse system



Battery monitor







Charger



