

Determination of power consumption for combined heating systems to determine the necessary battery capacities of battery packs and battery tanks

Heating products	7,4V - Battery	11,1V - Battery	14,8V - Battery	Enter A-value
3-Zone-Shirt	-	1,2A	1,6A	A
4-Zone-Shirt	-	1,8A	2,4A	A
6-Zone-Shirt	-	2,4A	3,2A	A
7-Zone-Shirt	-	3,0A	4,0A	A
3-Zone-Pants	-	1,2A	1,6A	A
3-Zone-Pant + calves	-	2,4A	3,2A	A
4-Zone-pant	-	1,8A	2,4A	A
4-Zone-pant + calves	-	3,0A	4,0A	A
Overall	-	4,2A	5,6A	A
Overall + calves	-	5,4A	7,2A	A
Overall for diving	-	5,4A	7,2A	A
Overall for diving + calves	-	6,6A	8,8A	A
Heating vest (up to XL)	-	3,7A	4,9A	A
Heating vest (from XXL)	-	4,9A	6,6A	A
Heating vest (for diving)	-	5,8A	7,7A	A
+ gloves	2,0A	2,6A	3,4A	A
+ insoles	0,9A	1,1A	1,5A	A
+ socks	0,9A	1,1A	1,5A	A
+ socks for diving	-	2,4A	3,2A	A
+ knee socks	-	2,4A	3,2A	A
+ head hood	-	1,5A	1,9A	A
Total current of all added heating consumers				= A
A-value x number of hours (planned heating time)				= Ah

A = Ampere, the current value for the consumption of single or multiple heating products. | Ah = ampere-hour, the required minimum capacity of the battery at 100% heating power.

Example calculation for an 11.1V battery supply:

4-zone shirt + gloves = $4.3\text{A} \times 2.5\text{h}$ (heating time in hours) = 10.75Ah.

The battery capacity should be at least 10.75Ah for 2.5 heating hours.

Accordingly, the next largest battery technology would be a battery with 11.1V/12Ah.