

## Carbon-based Power Capacitor Specifications



	18500T-010-32	18650T-013-25	none	
Nominal capacity (discharged with standard profile <1C) ± 5%	1,00	1,25		Ah
Nominal energy (discharging @1C till cut-off)	3,20	3,12		Wh
Nominal voltage	3,20	2,50		V
Recommended cut-off voltage @ 1C	2,50	1,70		V
Max. recommended charging voltage **	3,40	2,70		V
Rated capacity (discharging 50% max current till cut-off voltage)	0,950	1,15		Ah
Rated energy (discharged 50% max. current until the cut-off voltage) (cell)	3,00	2,40		Wh
Max. C-rate charging *** (cell)	3,00	12,0		C
Max. C-rate discharging *** (cell)	10,0	20,0		C
Max. continuous charging current *** (cell)	3,00	15,0		A
Max. continuous discharging current *** (cell)	10,0	25,0		A
Max. sustained power capability *** (cell)	4,00	3,91		W
Ohmic Resistance Ri (@50% SoC)	40,0	17,0		mΩ
Gravimetric energy density (cells) (@1C)	107	80,0		Wh/kg
Volumetric energy density (cells) (@1C)	231	175		Wh/dm <sup>3</sup>
Gravimetric power density (cells) @ max. C-rate	1.067	1.603		W/kg
Cycles life at 25°C	10.000	20.000		cycles
Dimensions of cell	18,6∅ x 51H	18,6∅ x 65,5H		mm
Recommended transportation voltage	3,10	2,40		V
Recommended storage voltage	3,10	2,40		V
Operation temperature	-20 to +70	-40 to +80		°C
Storage temperature	-5 to +35	-5 to +35		°C
Retained energy after 28 days at 25°C	95,0	95,0		%
Short circuit temperature	< 150	< 150		°C
Weight of cells	30,0	39,0		g
Guarantee period (manufacturing)	12,0	12,0		months
Fire Hazardous substances: Cells do not pose a fire or explosion risk.				

\* Custom designed. Specifications might deviate.

\*\* Cell damage possible outside these margins

\*\*\* Max. C-rating of powerpack is limited by selected cable and connector parameters and can be lower than theoretical maximum derived from cell parameters. C-rates can be higher than maximum for a short duration. Contact Altreonic case by case.