


## Preliminary

### Carbon-based Power Capacitor Specifications



	8256G-050-40	
Nominal capacity (discharged with standard profile <1C) $\pm$ 5%	5,00	Ah
Nominal energy (discharging @1C till cut-off)	17,5	Wh
Nominal voltage	4,00	V
Recommended cut-off voltage @ 1C	2,50	V
Max. recommended charging voltage **	4,20	V
Rated capacity (discharging 50% max current till cut-off voltage)	4,90	Ah
Rated energy (discharged 50% max. current until the cut-off voltage) (cell)	17,0	Wh
Max. C-rate charging *** (cell)	1,5	C
Max. C-rate discharging *** (cell)	1,5	C
Max. continuous charging current *** (cell)	7,50	A
Max. continuous discharging current *** (cell)	7,50	A
Max. sustained power capability *** (cell)	160	W
Ohmic Resistance Ri (@50% SoC)	$\leq$ 8	m $\Omega$
Gravimetric energy density (cells) (@1C)	206	Wh/kg
Volumetric energy density (cells) (@1C)	476	Wh/dm <sup>3</sup>
Gravimetric power density (cells) @ max. C-rate	353	W/kg
Cycles life at 25°C	> 20.000	cycles
Dimensions of cell	82 x 56 x 8	mm
Recommended transportation voltage	3,50	V
Recommended storage voltage	3,50	V
Operation temperature	-20 to +70	°C
Storage temperature	to +	°C
Retained energy after 28 days at 25°C	92	%
Weight of cells	85	g
Guarantee period (manufacturing)	12	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.