PRELIMINARY DATA SHEET

SkelMod
162V92F

+ 162V DC nominal voltage
+ Ultra-low ESR
+ Long lifetime - 1 million duty cycles
+ High power output

General Specifications	Value	Unit
Electrical		
Rated voltage	162	V
Rated capacitance	92	F
Rated DC 10ms ESR	9.0	mΩ
Rated DC 1s ESR	12.2	mΩ
Rated maximum peak current (for 1 s duration) [1, 9]	3.15	kA
Typical short circuit current (For informational purposes - do not use as operating current.)	18.1	kA
Maximum stored energy [2]	335.3	Wh
Cells in total	54	pcs
Cell configuration	54s1p	
Cell type	SCX5000	

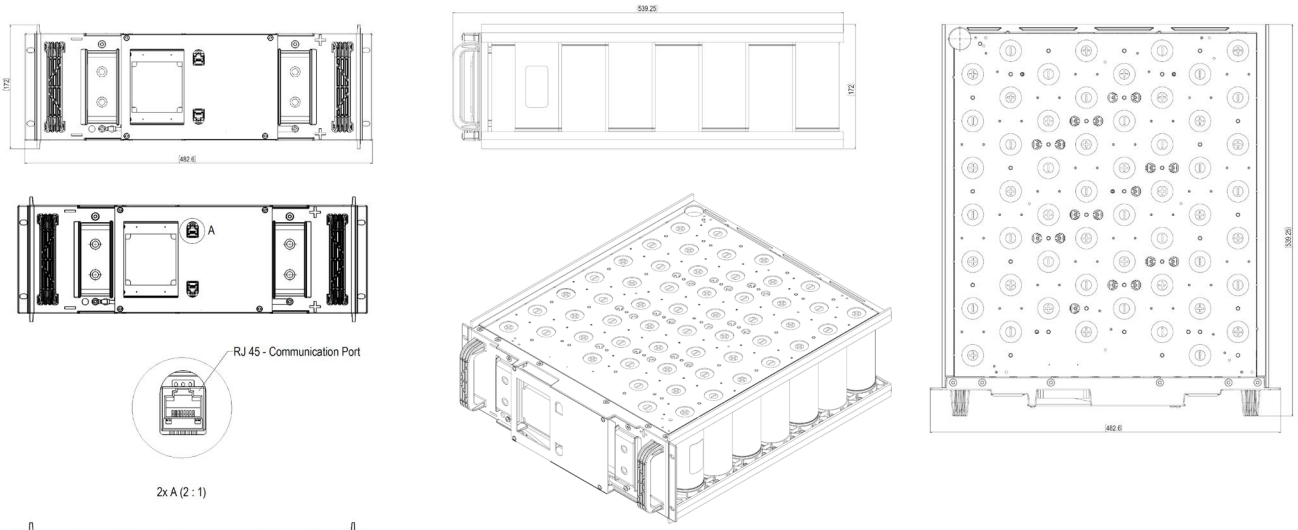
Physical parameters	Value	Unit
Mass. Typical	35.0	kg
Dimensions (WxHxL)	480 x 155 x	
Width indicates the dimensions for the front panel, the rest of the module is narrower and usable in a 19" rack.	510	mm

Temperature and Life	Value	Unit
Operating temperature range*		
Minimum	-40	°C
Maximum	+60	°C
Storage temperature range (uncharged)		
Minimum	-40	°C
Maximum	+50	°C
Life		
Lifetime @ 162V and maximum operating temperature	1500	Hours
Storage life @ RT, uncharged	10	Years
Projected cycle life @ RT, between V_R and V_R / 2	1,000,000	Cycles

Power

Rated nominal power, calculated from 10 ms ESR		
Power [6]	732.6	kW
Rated practical power, calculated from 1 s ESR		
Power [6]	538.0	kW

skeleton



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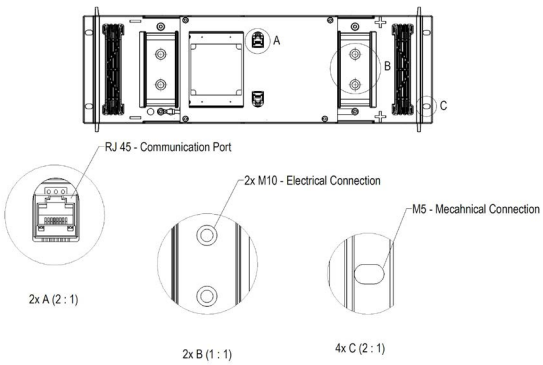

(1) Maximum peak current (1 sec) = $\frac{½\ CV}{C \times ESR + 1s}$ (2) $E_{stored} = \frac{½\ CV^2}{3600}$ (3) $E_{specific} = \frac{E_{stored}}{mass}$

(4) $P_{density} = \frac{P_{max}}{volume}$ (5) $E_{density} = \frac{E_{stored}}{volume}$ (6) $P_{max} = \frac{V^2}{4 \times ESR}$

(7) $P_{specific} = \frac{P_{max}}{mass}$ (8) $R_{th} = \frac{\Delta T}{DC\ 1s\ ESR \times I^2}$

(10) These values of current refer to begin of life conditions of the product, for system design 200% ESR should be considered.

+ Name of manufacturer, part number, serial number, rated voltage
+ Rated capacitance, negative and positive terminals, warning marking
+ Total energy in watt-hours