

**SIRIUS ENERGY STORAGE MODULE  
TECHNICAL DATA SHEET**

Part Number: 1000-12-B-0.6C-A-G Version Date: OCTOBER 2019

<b>PERFORMANCE SPECIFICATIONS</b>	Voltage (Nominal)	12 V <sub>dc</sub>
	Maximum Charge Voltage	13.5 V <sub>dc</sub>
	Discharge Cut-Off Voltage	11 V <sub>dc</sub>
	Total Energy	1000 Wh
	Maximum Charge Rate	50 A
	Maximum Discharge Rate	50 A
<b>ENVIRONMENTAL SPECIFICATIONS</b>	Cell Operating Temperature <sup>1</sup>	-30 °C to 80 °C
	Operating Humidity	Non-Condensing
<b>MECHANICAL SPECIFICATIONS</b>	Dimensions (w × d × h)	1560 mm × 78 mm × 117 mm
	Weight	23 kg Approx.
	Module Casing Material	Aluminum
	Terminal Type	F12
<b>SMART FEATURES</b>	Alarm	Audible alarm in the event of Over/under-Voltage, Over-Current, Over Temperature
<b>MODULE SERVICE LIFE</b>	Projected Cycle Life <sup>2,3</sup>	1 million cycles
	Projected Calendar Life <sup>3,4</sup>	45 years
	Shelf Life <sup>5</sup>	10 years
	Warehousing	Can be stored at any SOC without affecting cycle life
<b>COMPLIANCE<sup>6</sup> INFORMATION</b>	EN55032:2015, EN55024:2010, EN61000-4-2:2009, EN61000 EN61000:2008+A2:2010	
<b>PRECAUTIONS</b>	Alarm	In case of alarm, immediately rectify/attend to the cause of the alarm.
	Physical Damage	In case the Module is physically damaged due to any event, do not install and energize the Module under any circumstances and contact your Reseller.
	Short Circuit	Ensure precautions to prevent short-circuit under all circumstances.
	Galvanic isolation	When connecting to external devices ensure that galvanic isolation does not exceed 1000V.
	Charge/Discharge Current	Under no circumstances must the charge/discharge current exceed 50A.
	Charging Voltage	Under no circumstances must the charging voltage exceed 13.5 V <sub>dc</sub> for more than 60 seconds.
	Charge Cycle	During charge cycle ensure never to exceed constant voltage of 13.5 V <sub>dc</sub> and constant current of 50A.
	Series Connection	<ul style="list-style-type: none"> <li>All Modules must be at 100% SOC before connecting in series.</li> <li>A maximum of 15 Modules can be connected in series. Please consult your Reseller when connecting the Modules in series. Under no circumstances should more than 15 Modules be connected in series.</li> </ul>
	Parallel Connection	There is no limit on the number of Modules that can be connected in parallel.



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	Series-Parallel Connection	Modules cannot be connected in Series-Parallel combination under any circumstance.
<p><sup>1</sup>Cycle life may vary if the module is to be operated continuously outside a temperature range of -10°C to 55°C, and/or at C-rates higher than the maximum charge/discharge rate specified in this spec sheet. Please consult New Earth Energy or its Reseller prior to deploying the module in such applications.</p> <p><sup>2</sup>Projected Cycle life of Supercap cells.</p> <p><sup>3</sup>Additional terms and conditions, including a limited warranty, will apply at the time of purchase.</p> <p><sup>4</sup>Projected Calendar life of Supercap cells from the date of first operation</p> <p><sup>5</sup>Shelf life is the life of the module (in years) from the date it is manufactured to the time it is first operated</p> <p><sup>6</sup>Self-discharge for the module is 2% per month if idle (not charging or discharging) AND in Sleep Mode (switched off). If the module is not in sleep mode, then self-discharge may vary depending on ambient temperature.</p> <p><sup>7</sup>CE certification is completed for Supercap cells</p> <p><sup>8</sup>Consult New Earth Energy labs or New Earth Energy for information on connecting modules in series. Product dimensions are for reference only unless otherwise identified and may change without notice. For critical applications, please contact New Earth Energy.</p>		