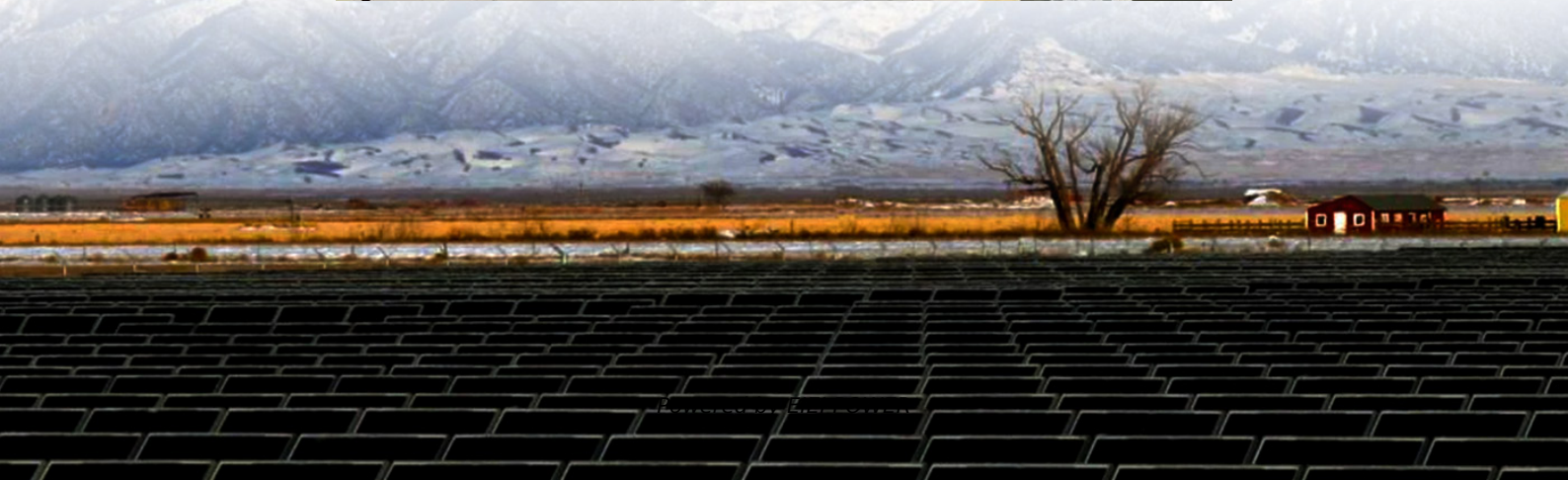


# How high a temperature can St John s super farad capacitor withstand





## Overview

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How long does a super capacitor last?

The life of supercapacitors will double for every 10°C decrease in temperature or voltage by 0.1V. Supercapacitors operated at room temperature can have life expectancies of several years compared to operating the capacitors at their maximum rated temperature. L1= Load life rating of the super capacitor (typically 1000 hours at rated temperature).

What temperature should a supercapacitor be rated at?

The standard temperature rating for Eaton supercapacitors is -25 °C to +70 °C. Temperature in combination with voltage can affect the lifetime of a supercapacitor. In general, raising the ambient temperature by 10 °C will decrease the lifetime of a supercapacitor by a factor of two.

Can a supercapacitor be operated out of a specified range?

Fig. 1 Example of Derating Temperature and Voltage to Extend Lifetime. Abracon does not recommend operating supercapacitors out of their specified ranges. For example, designing a 0-700C supercapacitor into a system that will experience 850C ambient temperature is not recommended, regardless of whether the temperature increase is temporary.

What is the operating temperature of a cylinder supercapacitor?

Cylindrical supercapacitors, ranging from compact to high-capacity variants, are now in mass production. Operating temperature range □ -40°C to +85°C, and withstand voltage levels between 2.5V and 3.0V.



## How high a temperature can St John s super farad capacitor withstand



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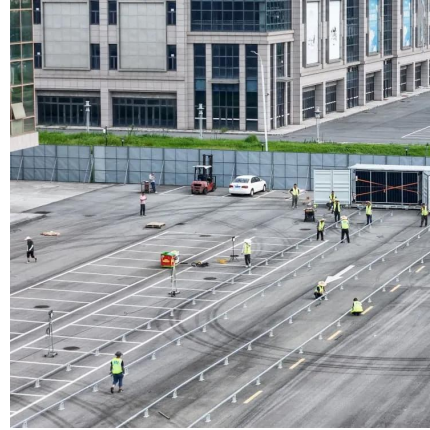


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