

Leyflar Supercapacitor

The Leyflar is the smallest class of supercapacitor modules created by [Solani Starworks](#), and is used primarily for firearms and personal devices. It was first used on the [Solanii Laiz Pistol](#) as other power sources were not able to provide for more than a few bursts.

Nomenclature Information

Organization: [Astral Vanguard](#) Government: [Iromakuanhe Astral Commonwealth](#) Designer: Solan Starwinds Manufacturer: [Solani Starworks](#) Name: Solanii Layflar Supercapacitor Type: Power Storage Device

Functionality

As a supercacitor, the Leyflar is able to achieve energy storage many times greater than that of electrolytic batteries, and is vastly safer to use than Lithium Ion and Polymer batteries. This is due to a differing construction process compared to standard electro-chemical batteries and capacitors. Traditional batteries use the separation of charge carriers, typically electrons, to store energy. Supercapacitors differ by employing a structure that contains an electrical double layer. In this double layer, the effective thickness of the insulator is exceedingly thin, which, combined with a proportionally large surface area, grants exceedingly high capacitance in practical sizes.

The downside is that the very double layer that makes the supercapacitor so potent also gives it very poor conductance, meaning that multiple in-series supercapacitors have to be assembled for more systems rated for high voltages.

From:

<https://wiki.stararmy.com/> - **STAR ARMY**

Permanent link:

https://wiki.stararmy.com/doku.php?id=faction:iromakuanhe:leyflar_supercapacitor

Last update: **2023/12/21 00:59**

