

## UltraCap modules from Siemens for efficient energy storage in machines

- **Protection during grid power outages and avoidance of peak loads**
- **Reduced power consumption by recovering braking energy**
- **Higher availability and low installation costs**

Siemens is offering new Ultracapacitor Modules which ensure machine operation during grid power outages, avoid peak loads and recover braking energy. The UltraCap "DLC modules" are ideal for use as energy storage devices in machines, such as those used in wood, glass and plastic processing, metal forming technology, machine tools, handling and robotics.

The UltraCap modules have a nominal voltage of 95 V and are typically connected in series in order to attain the required voltage level. They are connected via a DC-DC chopper or directly to the DC link of the Sinamics drive system. Multiple series can be used in parallel in order to tailor performance and energy content to the application in hand. The modules conform to CE and UL guidelines in both series and parallel switching. The rack housing features lateral ventilation slots and all connections are located on the front, enabling easy and space-saving installation in the control cabinet. An integrated processor monitors the ambient conditions and the state of the capacitor cells. The values obtain can be called up via a bus interface, thus enabling continuous monitoring.

### **Context: Smart Power Management from Siemens**

The Smart Power Management (SPM) solution from Siemens features energy storage with optimum power management for the Sinamics drive system. SPM ensures machines continue to operate even with unreliable grids, that peak loads

are avoided and braking energy utilized. This enables the availability and productivity of machinery to be increased while reducing installation and energy costs and cutting CO<sub>2</sub> emissions. Smart Power Management is used in wood, glass and plastic processing, metal forming technology, machine tools, handling and robotics. To meet varying user requirements, powerful electrolytic capacitors, flywheel storage units or battery systems can be used in addition to the DLC modules. To facilitate fast implementation, Siemens analyzes the load profile and then offers advice on the selection and design of a suitable storage device and on how to optimize the power flow.



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This press release and a press picture are available <https://sie.ag/2VE5ELS>

Learn more about Smart Power Management: [www.siemens.com/spm](http://www.siemens.com/spm)

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