

SuperCap UPS-SC01

Un-interruptible SuperCap Power Supply for Industrial IoT applications

The new **SuperCap UPS-SC01** backup power supply is equipped with a highly available backup feature to safely bridge fluctuations, drops or failures accompanying standard 9~30VDC supply voltage and avoid interruption of output voltage in industrial and automation environments.

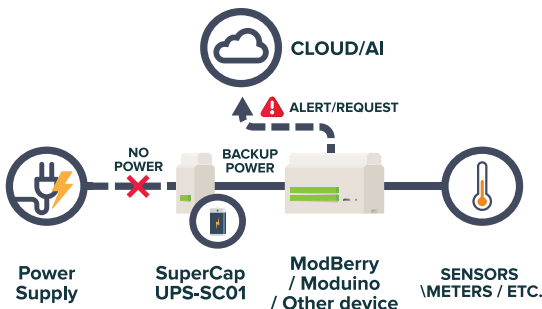
For this purpose **SuperCap UPS-SC01** utilizes two supercapacitors (so-called supercaps) as a durable, cycle-resistant and maintenance-free solution for backup energy storage and failure safety.

IIoT APPLICATION

As addition to Industrial IoT family of TECHBASE's products, such as **ModBerry** (Raspberry Pi Compute Module 3 powered) industrial gateways and **Moduino** (ESP32 powered) end-point devices, the SuperCap UPS-SC01 serves well as an additional, highly efficient and fanless power source to allow continuous operation of connected devices in difficult conditions, such as extended industrial temperature range. Perfect solution for a multi-range applications, especially for embedded IIoT / Industry 4.0 systems, where stability and high availability is most important.

SAFE SHUTDOWN

SuperCap UPS-SC01 allows the processes and data to be securely executed, saved or transferred, and the operating system to be safely shutdown or reboot, if the power source has been restored. The power failure alert can also be sent to cloud service, to perform custom task, specified by user or self-learning AI algorithm.



UNLEASH THE TRUE POTENTIAL
OF **INDUSTRIAL IoT**



SuperCap FEATURES



DC/DC transparent output with backup function



Supercapacitors for energy storage



Fanless and maintenance-free



High cycle stability



Suitable for 24/7 continuous operation



Individual Design-In advice



Excellent Service & Support



Long-term availability at least 5 years

SPECIFICATION



COST-EFFECTIVE & WIRELESS INDUSTRIAL IoT



Functions:	Power Fail signal output Energy Low alarm output Actual Energy Level analog output Force Reboot input Active reverse polarity protection
Power input:	9 ~ 30VDC, recommended: $\geq 40\text{W}$ (max. 42W) power supply
Charge time:	<60s at maximum charge current
Power consumption:	aprox. 0.2~0.4W power consumption when charged
Power output (powered):	9 ~ 30VDC
Power output (backup):	10VDC, max. 12W
Est. running time	up to 30s running time with 10W load up to 90s running time with 2-3W load (RPI / ModBerry-type device)* up to 270s running time with 1W load, active mode (ESP32 / Moduino-type device)* up to 600s running time with 0.3W load, idle mode (ESP32 / Moduino-type device)* * using additional resources on device, e.g. modem connection will decrease significantly these results
Efficiency:	94% typ.
Working conditions:	Standard temperature range: 0 ~ 60 °C Extended temperature range: -40 ~ +65 °C (optional)
Dimensions:	36 x 91 x 62 mm
Casing:	ABS, DIN rail mount

! Specifications is subject to change without notice. Some of the features are optional. Technical parameters should be confirmed in the order details.