

Product Brief - Self-Charging Battery SCBE2500A000400X

Introducing the next generation of power solutions –
The Self-Charging Battery (SCB)

Designed as a plug-and-play solution, the Self-Charging Battery makes the transition to light power easy. It's solder-free assembly connects directly to the PCB, simplifying integration and enabling integrators to focus on innovation rather than complexity.

With ease of use at its core, the SCB shortens development cycles, eliminates concerns about power management and minimizes setup time. This streamlined process ensures faster time-to-market, enabling economies of scale.



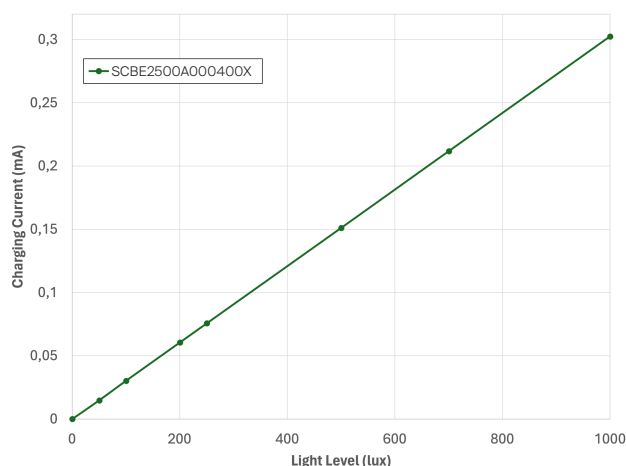
Product Specification

Nominal Voltage	2.4
Maximum Charge Voltage	2.835
Minimum Discharge Voltage	2.2
Max. Operational Temperature Range	-30 ~60°C
Nominal Capacity	4mAh
Typical Harvested Capacity per Year (office wall mounting 12 h)	375 mAh
Possible Harvested Capacity Over Lifetime (office desk mounting 24 h)	15000 mAh
Continuous Discharge Current	80mA (20C)
Max Short-Time Discharge Pulse Current	400mA (100C)
Weight	2.5g

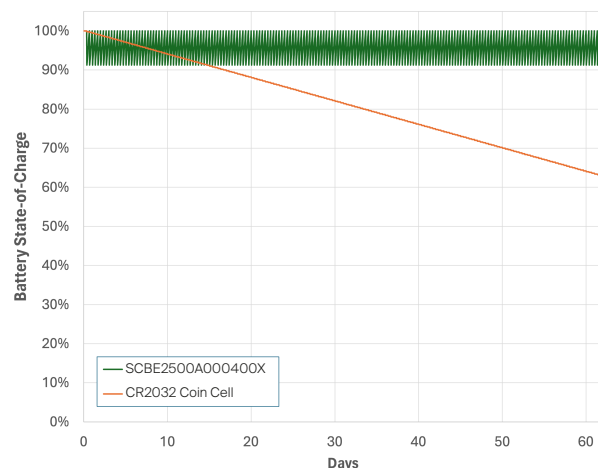
Usable Capacity during 10 years (mAh)

Light Level (lux) / Light per day (hours)	8 hours	16 hours	24 hours
CR2032 Coin Cell (Reference)	250	250	250
Home Wall (50 lux)	500	1000	1500
Office Wall (250 lux)	2500	5000	7500
Office Desk (500 lux)	5000	10000	15000

Charging Rate vs. Light Level



Charge-Discharge Cycle: Use-Case Example





A top-down diagram of a 2x4 connector layout. It shows a central black rectangular area with eight gold-colored rectangular ports arranged in two rows of four. The ports are labeled P1 through P8. P1, P2, P3, and P4 are in the top row, and P5, P6, P7, and P8 are in the bottom row. The ports are connected to a larger, light gray rectangular area on the left and right sides of the central black area.

SCB Dimensions

