

## NICHICON Announcing SLB Series Small Lithium-Titanate Rechargeable Batteries\* at CES

### NICHICON CORPORATION

NICHICON CORPORATION has developed the SLB Series of small lithium-titanate rechargeable batteries for use in the Internet of Things (IoT) market. The SLB Series has an increased temperature range, as well as a much larger lifespan than other rechargeable batteries, with over 25,000 charge/discharge cycles. The SLB Series will be on display at the CES 2023 show, North Hall, Booth 11035, IoT Infrastructure Pavillion.

With the increase in IoT applications, the need for a rechargeable battery that works harder and smarter has risen. The SLB Series is our response to primary batteries used in these sectors. An improved rechargeable battery that can utilize energy harvesting devices is not only a major convenience, but a major upgrade to the standard set of primary batteries used in these applications.

The SLB Series technology is provided by Toshiba Corporation's SCiB rechargeable battery technology. The SLB Series has a prolonged life, maintaining just over 80% of its initial capacity after 25,000 charge/discharge cycles. Temperature performance has also been improved with charge and discharge rates at as low as -30°C.

Additionally, the active material for the negative electrode is lithium titanate oxide (LTO). LTO has a greater thermal stability than the carbon-based materials traditionally used in lithium-ion rechargeable batteries. This helps reduce the risk of fire or explosion, even in the case of forced internal short circuit.

\*A Lithium-Titanate Rechargeable Battery, or LTO battery, is a modified lithium-ion battery.

### Main Specifications

- Rated Voltage : 2.4V
- Maximum charging voltage : 2.8V
- Discharge cutoff voltage : 1.8V
- Rated Capacity : 0.35mAh to 150mAh
- Category Temperature range : -30°C to +60°C
- Maximum current : 20C (Continuous)
- Product dimensions :  $\phi 3 \times 7L$  (mm) to  $\phi 12.5 \times 40L$  (mm)
- Life : 25,000 charge/discharge cycles
- Terminal shape : Lead type

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