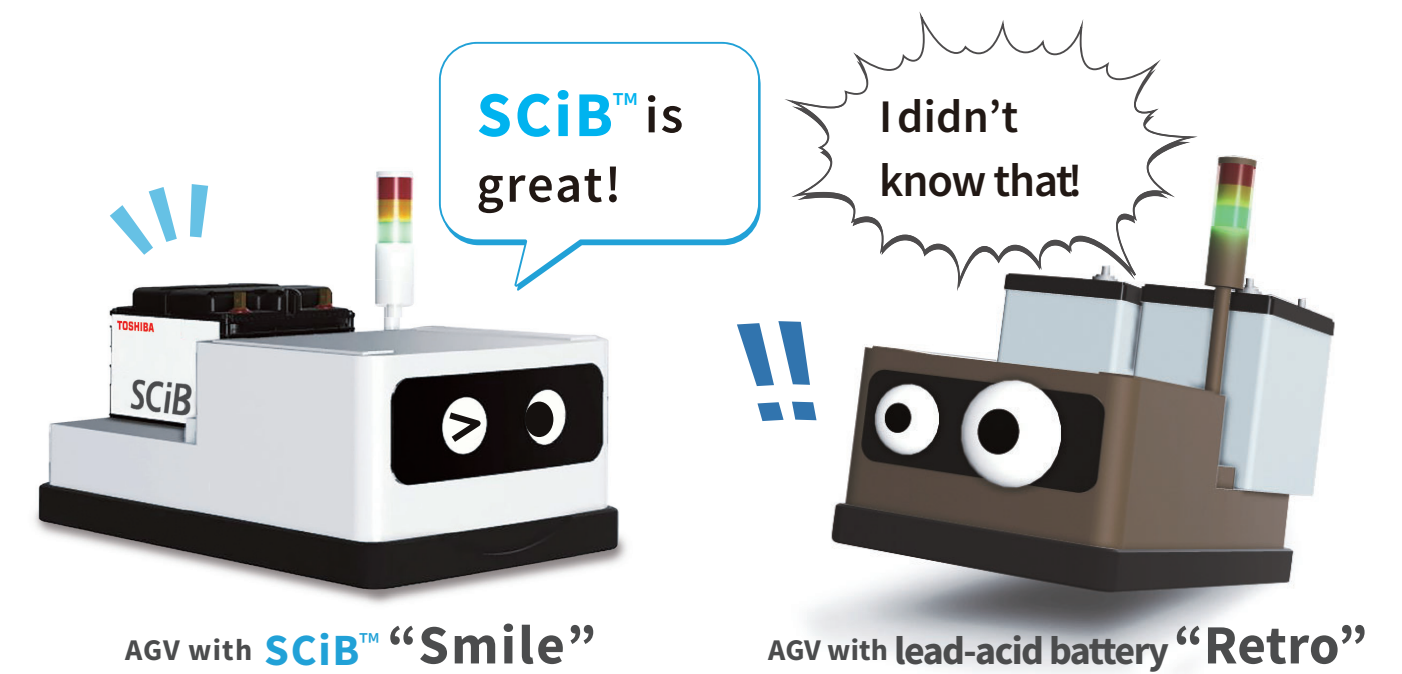


Industrial Lithium-ion Battery *SCiB*™ Industrial Pack

The reasons why “SCiB™” is chosen rather than lead-acid batteries or other lithium-ion batteries



Higher safety

Dedicated space for charging is required due to the possibility of hydrogen gas emission

We can use SCiB™ safely because it does not produce hydrogen gas! We can charge SCiB™ anywhere!

Lead acid battery

SCiB™

- No emission of hydrogen gas
- No risk of lithium metal deposition
- Lower risk of smoke or ignition
- Complying with various safety standards

Rapid charging

8 hours

Spare machine or battery is necessary for 24/7 operations

1 hour

Lead acid battery

SCiB™

- 8 hours (lead-acid battery) → 1 hour (SCiB™ Industrial Pack)
- Improvement of the operation rate
- Spare battery is not necessary

10 years life

Life 1 to 3 years

Life 10 years

Lead acid battery

SCiB™ Industrial Pack

- More than 20,000 cycles of life
- 10 years lifetime, 3 times more than that of lead-acid battery
- Environment-friendly and reducing the total cost

Compact & Lightweight

Weight 1/4

Lead acid battery

SCiB™

- Only 8kg, 1/4 the weight of lead-acid batteries
- Reducing the workload
- Saving energy cost of AGV

Equipped with BMU*

*BMU: battery management unit

Protection 23Ah

Self-monitoring & Self-management

BMU

Communication Digital I/O

Temperature Voltage

Main circuit FET

Charge-discharge circuit

SOC

- One-package solution

Self-monitoring/ Protection/ Communication/ Digital I/O

Low temperature

Discharging temperature characteristics (20Ah cell)

Discharging capacity (%)

C/3 discharging capacity at each temperature

C/3 discharging capacity at 25°C

(Charged at 25°C)

Discharging temperature(°C)

- SCiB™ outputs 70% or higher capacity even when the ambient temperature is at -30°C

Using 100% DOD*

*DOD: Depth of Discharge

Unused area

50%

Unused area

100%

Equivalent capacity

100% of DOD is available

Lead acid battery

Conventional lithium-ion battery

SCiB™

- A lead-acid battery is usually used by approx. 50% of DOD in order to prevent degradation.
- SCiB™ is available at 100% of DOD

Easy replacement

You can easily handle and use

Lead acid battery

SCiB™ Industrial Pack

- No complicated wiring
- Only need to turn on the start signal

