

SRA Ni-Cd battery

The medium power backup battery for railway applications

Saft's SRA nickel-based battery range assures continuity of onboard auxiliary backup applications and delivers outstanding performance, especially in arctic and desert temperature extremes.

Saft's SRA Standard range delivers reliable power in a compact package. SRA LT enables a smaller battery size to support the required load profile in low temperatures, while SRA HT offers superior charge efficiency in higher temperatures, providing increased capacity for the ideal battery solution.

The SRA design is fully compatible with Saft's range of standardized railway battery systems while its robust and reliable Ni-Cd technology ensures a long and predictable service life.

Applications

All types of trains

- Urban transport: metros, tramways, tram-trains, airport shuttles
- Regional transport: EMU, DMU (Electric and Diesel Multiple Units)
- Intercity transport: high-speed trains, electric locomotives, passenger coaches

All types of function

- Passenger safety: onboard signaling, security lighting, door control and communication networks
- Passenger comfort: ventilation, air-conditioning, lighting, Wi-Fi
- Fail-safe train start-up: pantograph lift-up, computing, electronics

Benefits

- Optimized performance for extreme temperatures
- Reduced installation footprint and lower weight (30% reduced volume and weight compared with a standard Ni-Cd battery)
- Reduced LCC (Life Cycle Cost) and improved LCA (Life Cycle Assessment)
- Customizable for specific needs
- Easy integration of standard cell design into customer battery systems

Features

- Saft's Sintered/PBE Ni-Cd technology ensures reliable and predictable service life (20 years)*, without risk of sudden death
- Low maintenance:
 - topping-up interval up to 6 years or more
 - only one reconditioning operation in the battery service life



Temperature

Operating temperature (SRA)	From -30°C to +50°C
Operating temperature (SRA LT)	From -50°C to +40°C
Operating temperature (SRA HT)	From -20°C to +65°C
Resistance to extreme temperatures	From -50°C to +70°C

Maintenance

Low maintenance thanks to long interval between topping-up operation (for LT & HT consult Saft)	6 years or more (less than 35°C average, with charging temperature compensation)
Optimized reconditioning operation (for LT & HT consult Saft)	Once in the battery lifetime
Optional water filling vents allow for quick and accurate topping-up to minimize maintenance costs	Less than 10 minutes for active topping-up operation

Light and compact design

Gain in container and battery compartment size vs conventionally sized batteries	60% depending upon requested mission profile
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Wide capacity range

Capacity range to optimize sizing to specific performances request	From 70 to 375 Ah
Available crates for easy integration and handling	For 2 to 8 cells

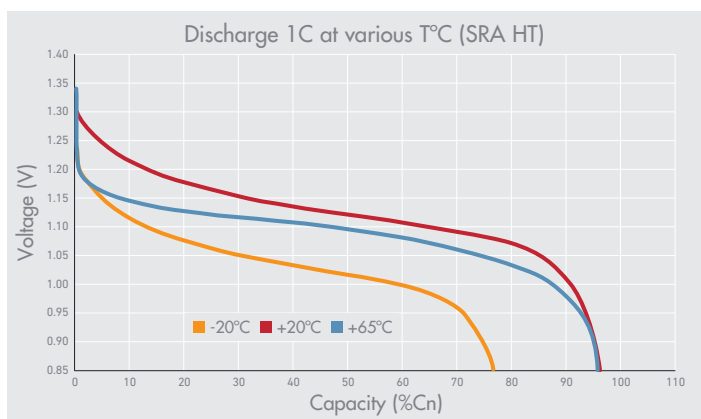
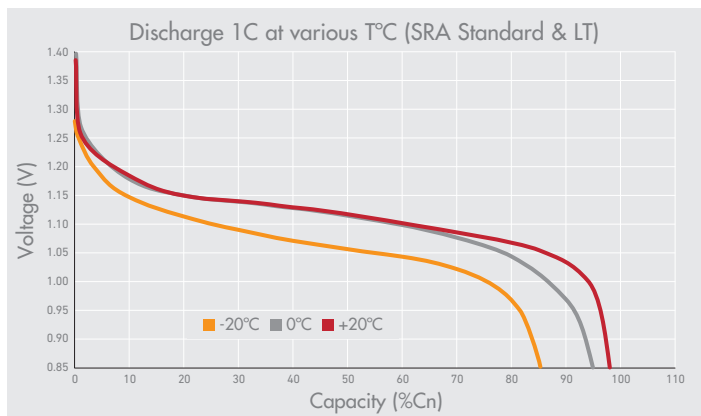
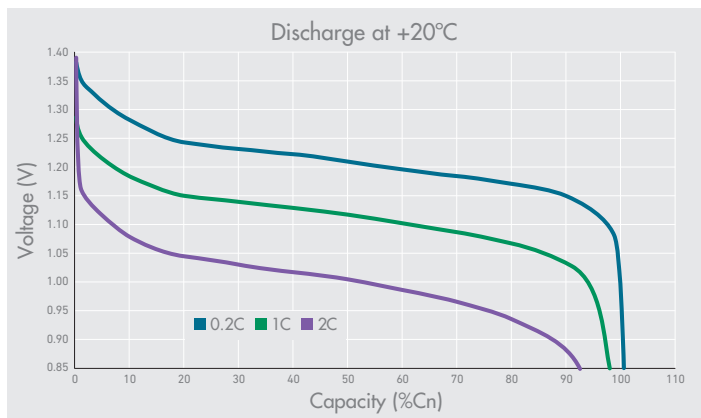
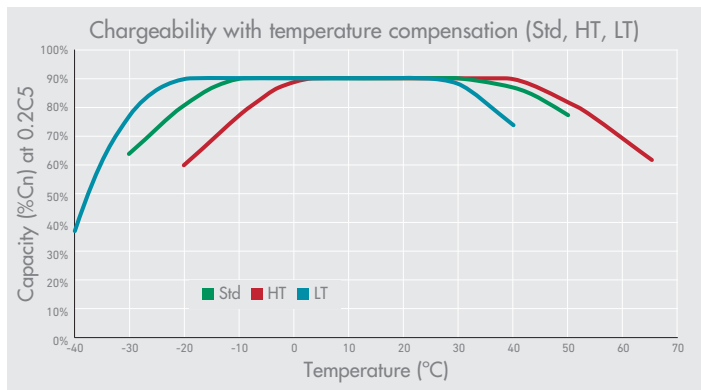
* The data provided are nominal values and actual results may vary depending upon application conditions.

- Available in three versions:
 - SRA Standard for use between (-30°C to +50°C)
 - SRA LT for low temperatures (-50°C to +40°C)
 - SRA HT for high temperatures (-20°C to +65°C)
- Performance
 - Designed for discharge levels of 2C5A continuous and 5C5A peak
 - Optimized performance eliminates the need to oversize the battery
- Flexibility in capacity, container type and maintenance systems
 - Single cell capacities range from 70 to 375 Ah
 - Containers available in various plastics (FRpp, P, F2) and stainless steel containers
 - Optional centralized water filling system
- Fully compatible with Saft's railway battery systems
 - Direct fitting within standard systems
 - Customized battery boxes also available
- Batteries can be integrated into bespoke trays designed to suit specific applications



Full conformity with quality, safety and environmental standards

- Electrical: exceeds the medium "M" type requirements of IEC 60 623, also significantly exceeds UIC 854 requirements
- Integration: EN 50547 railway auxiliary onboard battery
- Fire & smoke: NFF 16101-16102, DIN 5510-2, UNI IEC 11170-3, UL 94-V0, NFPA 130 for ASTM E 162 and E 662
- Shocks & vibrations: IEC 61 373
- Quality: ISO 9001, ISO/TS 22163 (IRIS), Saft world class continuous improvement program
- Environment: fully recyclable, ISO 14001, RoHS, REACH
- Others: DIN 40771, BS 6260



Saft
 ESS & Mobility
 26 quai Charles Pasqua
 92300 Levallois-Perret – France
 Tel. : +33 1 58 63 16 00
 Fax : +33 1 58 63 16 18
 www.saftbatteries.com

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