

saft



Optimax Ni-Cd Battery

The highly sustainable
maintenance-free
solution for backup
power applications



TotalEnergies



Contents

- 2 Optimax: The ideal choice**
- 3 Sustainability in focus**
- 4 Optimax: The ideal replacement**
- 5 Making operation easy**
- 6 Performance**
- 7 Design features**
- 8 Physical properties**
- 9 Our end-to-end support**

Uptimax

The ideal choice for total security and availability

Make Saft your eco-friendly battery partner for stationary applications

Saft has over 100 years of experience working in partnership with leading industrial customers to deliver well-proven Ni-Cd battery solutions optimized to ensure the total security and availability of stationary applications including power backup, engine starting and bulk energy storage.

Developed for demanding industrial installations

Uptimax batteries are at the heart of power backup systems throughout the oil and gas exploration and production, utility and manufacturing industries. If mains power is lost, Uptimax delivers the vital power to ensure the continuity of mission-critical loads, facilitate safe shutdown processes, bridge to standby power and safeguard computer data.

That's why Uptimax is the trusted choice for power backup applications including: UPS, substation, switchgear, process control systems, emergency lighting, fire alarms and security systems.



Why Uptimax?

- Easy installation and operation
- Maintenance-free
- High performance
- Strong chargeability
- Total reliability
- Flexible configuration
- Environmentally responsible
- Designed with the highest of standards
- End-to-end support from Saft experts

Sustainability in focus

A unique use of recycled materials

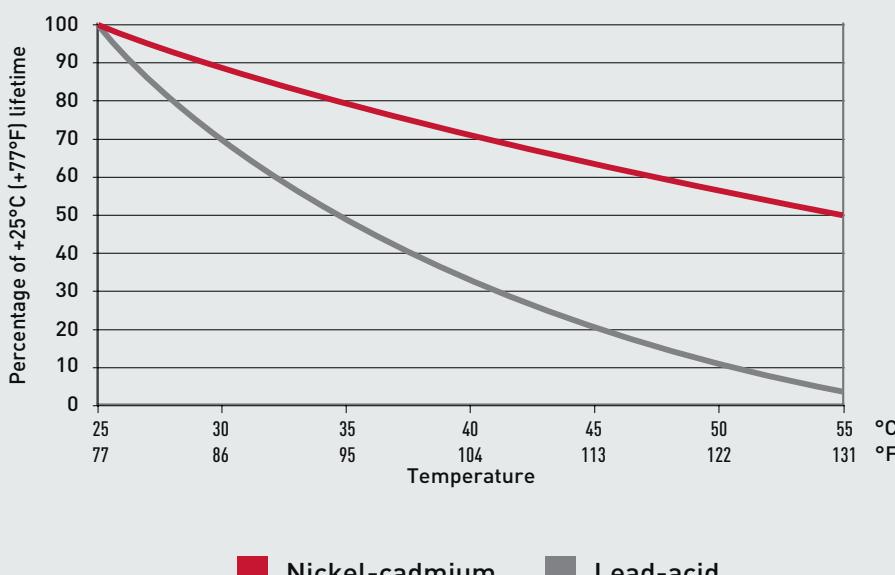
Saft operates the only plant in the world that produces nickel-cadmium batteries incorporating metals that have been reclaimed on site from spent batteries, reducing their eco-footprint.

The recycling of Ni-Cd batteries is a complex process that involves separating the nickel, cobalt and cadmium from the electrodes, a process perfected by Saft's plant in Oskarshamn, Sweden. This plant is unique in combining the recycling of used batteries and the manufacturing of new ones, hence facilitating the incorporation of recycled materials into new products.

Ni-Cd batteries: the environmentally responsible choice

Saft's robust Ni-Cd technology sets the benchmark for industrial batteries operating in difficult and demanding conditions. It has established a reputation for performance, reliability, sustainability and a long, totally predictable service life – with no risk of sudden death failure.

Effect of temperature on lifetime



Uptimax builds on this heritage by ensuring a 20-year plus service life at +25°C (+77°F). Even at +35°C (+95°F), its lifetime falls by just 20% compared with a 50% reduction for a lead-acid battery.



Saft Excellence System



Designed with the highest standards

Optimax batteries are designed in full compliance with the highest quality, safety and environmental standards.

Electrical and performances

- Certified IEC 62259 - Secondary cells and batteries containing alkaline or other non-acid electrolytes - Nickel-cadmium prismatic secondary single cells with partial gas recombination. Optimax New Generation exceeds gas recombination requirements.
- Certified IEC 60623 - Secondary cells and batteries containing alkaline or other non-acid electrolytes - Vented nickel-cadmium prismatic rechargeable single cells.

Quality

- ISO 9001 und ISO 14001
- Saft Excellence System

Safety

- Complies with EN 50272-2/ IEC 62485-2 - Safety requirements for secondary batteries and battery installations - Part 2: Stationary batteries. The protective covers for terminals and connectors, and the insulated cables, are compliant with IP2X level protection against electrical shocks according to safety standard.

Environment and recycling

- Fully recyclable
- RoHS – Although batteries and accumulators are not within the scope of the RoHS directive, Saft has taken voluntary measures to make sure that the substances forbidden by RoHS are not present in the battery, with the exception of the electro-chemical core.
- REACH - Saft has adopted internal procedures to ensure conformity with the European REACH (Registration, Evaluation, Authorisation and Restriction of Chemical Substances) Regulation.
- Saft operates a network of over 30 bring back points worldwide that receive spent Ni-Cd batteries manufactured by Saft. The bring back points located in northern Europe bring these used batteries back to Oskarshamn, minimizing transportation. Other bring back points work with other fully permitted recycling partners selected by Saft. This take back and recycling service ensures that the recycling efficiency mandated by the EU battery directive is met and that we have closed the loop on responsible production of Ni-Cd batteries.



In 2023, the sustainability performance of Saft was evaluated by Ecovadis, a leading Environment and Social Responsibility rating agency. This evaluation focuses on the following matters: environment, labor and human rights, ethics as well as sustainable procurement.

Saft is ranked within the top 1% of companies involved in the manufacture of batteries and accumulators.



Program Net Zero

Saft has launched our sustainability initiative, Program Net Zero, consisting of five pillars:

- 1** Reducing the environmental footprint of our activities and that of our battery solutions.
- 2** Assisting Saft's customers in lowering their environmental footprint.
- 3** Using natural resources sustainably and implementing circular economy principles throughout our operations.
- 4** Prioritizing suppliers with strong environmental, social, and human rights records.
- 5** Working to always ensure compliance with environmental regulations and best practices in all locations.

Batteries facilitate the shift towards clean energy, but there is much work to do to achieve Net Zero. That's why Saft is committed to reducing its impact, while respecting social and human rights all along the value chain.

Uptimax is the ideal replacement for lead-acid batteries

The first Ni-Cd battery for Plug & Play replacement of lead-acid

The latest generation of Uptimax is the perfect fit to replace lead-acid batteries.

Thanks to its 1.39 V/cell single level charge without the need for boost charge, Uptimax can be charged in all commonly used DC-systems with +/- 10% voltage window. This reduces the need for dropping diodes or DC/DC converters, and as a consequence it decreases the overall cost of DC-systems.

When a fast recharge is needed, 95% State-Of-Charge (SOC) in 8h can be reached at 1.45 V/cell for maximum availability after a power failure and minimum downtime.







Making operation easy

The maintenance-free battery for stationary applications

Uptimax is Saft's latest development in Ni-Cd pocket plate battery technology. It combines maintenance-free operation with total reliability to provide the ideal backup power solution for industrial installations.

Maintenance-free means that no addition of water is necessary during the lifetime of the product when operating under Saft's recommended conditions.

Uptimax is maintenance-free thanks to a new high-tech design concept:

- Uptimax never needs water to be added throughout its entire service life (under Saft's recommended operating conditions - from -20°C (-4°F) to +40°C (+104°F)).
- Maintenance is reduced to a minimum: only preventive maintenance is necessary.
- The high level of gas recombination is beyond the requirements of IEC 62259 (recombination level higher than 95%), and Uptimax reduces water consumption and gas emissions.
- Uptimax is equipped with a low pressure flame-arresting vent.



Why Ni-Cd?

Sustainability

- Our manufacturing process and recycling capability ensures the lowest CO₂ footprint.
- The wide operating temperature range makes AC and heating redundant, thereby saving energy

Reliability

- A long operational life of over 20 years, at least three times longer than lead-acid batteries
- No risk of sudden death failure

The economical choice

With its low pressure flame arresting vent, high electrical performance and chargeability, Optimax delivers the lowest optimized TCO (Total Cost of Ownership).

High performance, chargeability and reliability

High performance optimizes battery life cost and reduces CO₂ footprint

Optimax offers high performance. This enables installers to specify a battery optimized for their specific application, saving on initial purchase costs.

- Optimax design enables high battery electrical performance whatever discharge time is needed.
- Commissioning is simple and easy and can still be

carried out using any commercially available charger even after up to six months in storage.

- The minimal need for heating or cooling reduces carbon emissions.

Good chargeability minimizes battery downtime

- Optimax features fast and simple charging, within a narrow voltage window, for minimal downtime and maximum availability.
- Single or two-level charging regimes are possible:

Single level charge

- 1.39 or 1.42 ± 0.01 V/cell

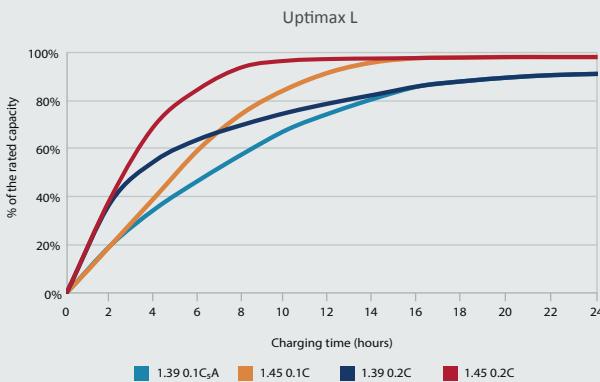
Two level charge

- Float level: 1.39 or 1.42 ± 0.01 V/cell
- High level: 1.45 ± 0.01 V/cell
- The fast recharge enables 95% SOC in 8h at 1.45 V/cell for maximum availability after a power failure, at +20°C (+68°F), after a constant voltage charge for 15 hours with an available charge current of 0.1 C₅A.

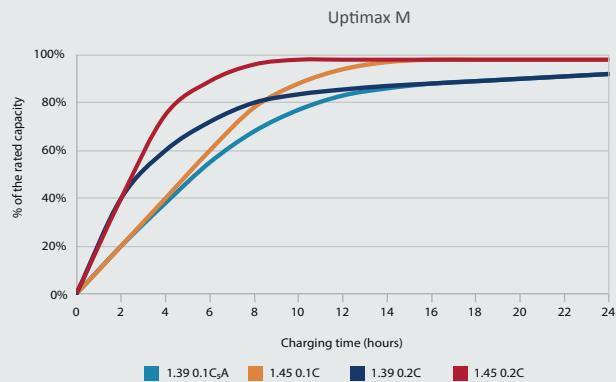
Total reliability ensures the safe operation of industrial equipment

- Optimax provides complete peace of mind, whatever the application, whatever the location. Even in the most demanding operating conditions.
- Total reliability is based on a unique Ni-Cd electrochemistry/technology combined with the well proven Saft Nife® pocket plate design.
- It enables a long service life of over 20 years at +25°C (+77°F).
- Robust construction eliminates risk of sudden death failure.
- Optimax delivers long life and outstanding performance in temperatures up to +40°C (+104°F) and tolerates -40°C (-40°F) to +70°C (+158°F) for short durations.

Available capacity after constant voltage charge
Available charge current 0.1 C₅A or 0.2 C₅A
for L type cell



Available capacity after constant voltage charge
Available charge current 0.1 C₅A or 0.2 C₅A
for M type cell



Design features

Easy handling, installation and operation

Our modular approach, based on flexible block configurations, means Optimax batteries make transportation, installation and operation fast and easy.

- Batteries are only delivered filled with electrolyte and in electrically charged condition.
- Storage for up to two years in normal conditions is possible.
- Design enables batteries to be assembled in blocks of up to 10 cells connected in series.
- Flexible block configuration makes the battery easy and fast to install.

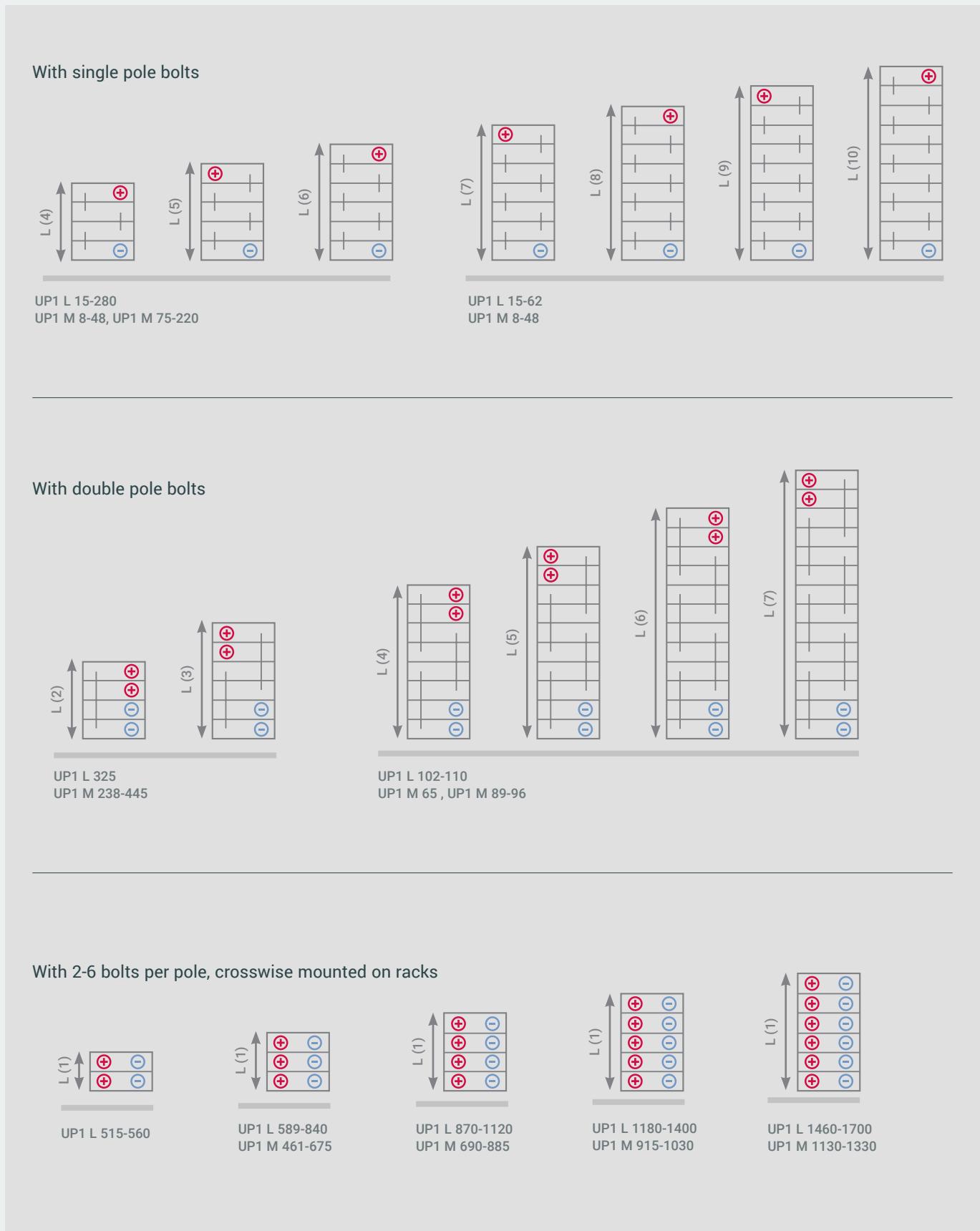
- 1 Low pressure vent
- 2 Terminal pillars protected by covers in line with EN 50272-2 / IEC 62485-2 (safety) with IP2 level
- 3 Plate group bus bar
- 4 Plate tab
- 5 Polypropylene cell container
- 6 Pocket plate
- 7 Polypropylene fibrous separators



Cells are welded together to form a rugged block up to 10 depending on cell size and type

Design features

Flexible configuration based on cell blocks



Optimax

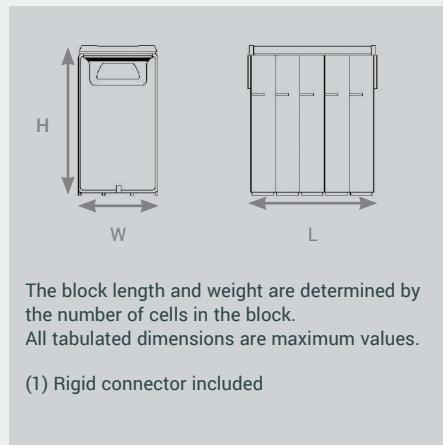
Physical properties L range

Cell Type	Capa- city	Height	Width	Length per block												Approx. Weight per cell	Internal Resistance	Bolt per pole						
				2 cells		3 cells		4 cells		5 cells		6 cells		7 cells		8 cells		9 cells						
	C _s Ah	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	kg	lb	mOhm		
UP1L15	15	270	10.6	123	4.8			123	4.8	153	6.0	182	7.2	212	8.3	241	9.5	271	10.6	300	11.8	1.1	2.4	12.07 M6
UP1L30	30	270	10.6	123	4.8			143	5.6	178	7.0	212	8.3	247	9.7	281	11.1	316	12.4	350	13.8	1.8	4.0	6.03 M6
UP1L47	47	270	10.6	123	4.8			191	7.5	238	9.4	284	11.2	331	13.0	377	14.8	424	16.7	470	18.5	2.5	5.5	3.85 M6
UP1L57	57	270	10.6	123	4.8			239	9.4	298	11.7	356	14.0	415	16.3	473	18.6	532	20.9	590	23.2	3.1	6.8	3.18 M6
UP1L62	62	270	10.6	123	4.8			239	9.4	298	11.7	356	14.0	415	16.3	473	18.6	532	20.9	590	23.2	3.2	7.1	2.92 M6
UP1L75	75	270	10.6	123	4.8			329	13.0	410	16.1	491	19.3	572	22.5							4.3	9.5	2.41 2xM6
UP1L83	83	421	16.6	195	7.7			157	6.2	193	7.6	229	9.0									4.8	10.6	2.92 M8
UP1L95	95	421	16.6	195	7.7			157	6.2	193	7.6	229	9.0									4.9	10.8	2.55 M8
UP1L102	102	270	10.6	123	4.8			425	16.7	530	20.9	635	25.0	740	29.1							5.7	12.6	1.77 2xM6
UP1L110	110	270	10.6	123	4.8			425	16.7	530	20.9	635	25.0	740	29.1							5.7	12.6	1.65 2xM6
UP1L124	124	421	16.6	195	7.7			205	8.1	253	10.0	301	11.9									6.6	14.6	1.95 M10
UP1L140	140	421	16.6	195	7.7			205	8.1	253	10.0	301	11.9									6.7	14.8	1.73 M10
UP1L167	167	421	16.6	195	7.7			253	10.0	313	12.3	373	14.7									8.3	18.3	1.45 M10
UP1L185	185	421	16.6	195	7.7			253	10.0	313	12.3	373	14.7									8.4	18.5	1.31 M10
UP1L210	210	421	16.6	195	7.7			305	12.0	378	14.9	451	17.8									9.6	21.2	1.15 M10
UP1L225	225	421	16.6	195	7.7			305	12.0	378	14.9	451	17.8									9.7	21.4	1.08 M10
UP1L235	235	421	16.6	195	7.7			305	12.0	378	14.9	451	17.8									9.9	21.8	1.03 M10
UP1L250	250	421	16.6	195	7.7			353	13.9	438	17.2	523	20.6									11.4	25.1	0.97 M10
UP1L280	280	421	16.6	195	7.7	183	7.2	268	10.6	353	13.9	438	17.2	523	20.6							11.5	25.4	0.86 M10
UP1L294	294	421	16.6	195	7.7	229	9.0	337	13.3													14.9	32.8	0.82 2xM10
UP1L325	325	421	16.6	195	7.7	229	9.0	337	13.3													15.1	33.3	0.74 2xM10
UP1L350	350	421	16.6	195	7.7	253	10.0	373	14.7													16.7	36.8	0.69 2xM10
UP1L375	375	421	16.6	195	7.7	253	10.0	373	14.7													16.8	37.0	0.65 2xM10
UP1L420	420	421	16.6	195	7.7	279	11.0	412	16.2													18.3	40.3	0.58 2xM10
UP1L454	454	421	16.6	195	7.7	305	12.0	451	17.8													19.5	43.0	0.53 2xM10
UP1L470	470	421	16.6	195	7.7	305	12.0	451	17.8													19.8	43.7	0.51 2xM10
UP1L500	500	421	16.6	195	7.7	329	13.0	487	19.2													21.2	46.7	0.48 2xM10

Optimax

Physical properties L range

Cell Type	Capa- city	Height	Width	Length per block		Approx. Weight per cell	Internal Resis- tance	Bolt per pole
				1 cells				
	C _s Ah	mm	in	mm	in	kg	lb	mOhm
UP1L 515	515	411	16.2	195	7.7	171	6.7	21.4 47.2 0.47 2xM10
UP1L 560	560	411	16.2	195	7.7	183	7.2	23.0 50.7 0.43 2xM10
UP1L 589	589	411	16.2	195	7.7	207	8.1	26.2 57.8 0.41 3xM10
UP1L 610	610	411	16.2	195	7.7	207	8.1	26.5 58.4 0.40 3xM10
UP1L 650	650	411	16.2	195	7.7	219	8.6	28.2 62.2 0.37 3xM10
UP1L 664	664	411	16.2	195	7.7	219	8.6	28.5 62.8 0.36 3xM10
UP1L 700	700	411	16.2	195	7.7	232	9.1	29.7 65.5 0.35 3xM10
UP1L 725	725	411	16.2	195	7.7	243	9.6	31.2 68.8 0.33 3xM10
UP1L 750	750	411	16.2	195	7.7	243	9.6	31.4 69.2 0.32 3xM10
UP1L 775	775	411	16.2	195	7.7	256	10.1	32.6 71.9 0.31 3xM10
UP1L 800	800	411	16.2	195	7.7	256	10.1	32.9 72.5 0.30 3xM10
UP1L 840	840	411	16.2	195	7.7	268	10.6	34.5 76.1 0.29 3xM10
UP1L 870	870	411	16.2	195	7.7	292	11.5	37.5 82.7 0.28 4xM10
UP1L 890	890	411	16.2	195	7.7	292	11.5	38.1 84.0 0.27 4xM10
UP1L 914	914	411	16.2	195	7.7	305	12.0	39.2 86.4 0.26 4xM10
UP1L 940	940	411	16.2	195	7.7	305	12.0	39.6 87.3 0.26 4xM10
UP1L 980	980	411	16.2	195	7.7	316	12.4	41.2 90.8 0.25 4xM10
UP1L 990	990	411	16.2	195	7.7	316	12.4	41.8 92.2 0.24 4xM10
UP1L 1010	1010	411	16.2	195	7.7	328	12.9	42.2 93.0 0.24 4xM10
UP1L 1030	1030	411	16.2	195	7.7	328	12.9	42.9 94.6 0.23 4xM10
UP1L 1080	1080	411	16.2	195	7.7	341	13.4	45.3 99.9 0.22 4xM10
UP1L 1120	1120	411	16.2	195	7.7	353	13.9	46.0 101.4 0.22 4xM10
UP1L 1180	1180	411	16.2	195	7.7	378	14.9	49.5 109.1 0.21 5xM10
UP1L 1220	1220	411	16.2	195	7.7	388	15.3	51.3 113.1 0.20 5xM10
UP1L 1260	1260	411	16.2	195	7.7	402	15.8	53.3 117.5 0.19 5xM10
UP1L 1300	1300	411	16.2	195	7.7	413	16.3	54.4 119.9 0.19 5xM10
UP1L 1324	1324	411	16.2	195	7.7	413	16.3	55.7 122.8 0.18 5xM10
UP1L 1350	1350	411	16.2	195	7.7	426	16.8	57.1 125.9 0.18 5xM10
UP1L 1400	1400	411	16.2	195	7.7	438	17.2	57.5 126.8 0.17 5xM10
UP1L 1460	1460	411	16.2	195	7.7	463	18.2	61.3 135.1 0.17 6xM10
UP1L 1500	1500	411	16.2	195	7.7	473	18.6	62.8 138.4 0.16 6xM10
UP1L 1540	1540	411	16.2	195	7.7	487	19.2	64.5 142.2 0.16 6xM10
UP1L 1570	1570	411	16.2	195	7.7	498	19.6	65.0 143.3 0.15 6xM10
UP1L 1600	1600	411	16.2	195	7.7	498	19.6	65.9 145.3 0.15 6xM10
UP1L 1700	1700	411	16.2	195	7.7	523	20.6	69.0 152.1 0.14 6xM10



Optimax

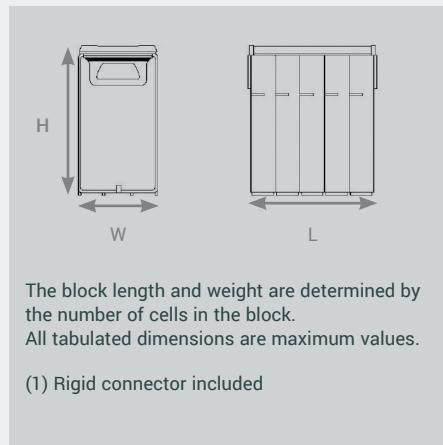
Physical properties M range

Cell Type	Capa- city	Height	Width	Length per block												Approx. Weight per cell	Internal Resistance	Bolt per pole							
				2 cells		3 cells		4 cells		5 cells		6 cells		7 cells		8 cells		9 cells							
	C _s Ah	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mOhm					
UP1M 8	8	270	10.6	123	4.8			123	4.8	153	6.0	182	7.2	212	8.3	241	9.5	271	10.6	300	11.8	1.1	2.4	12.50	M6
UP1M 16	16	270	10.6	123	4.8			123	4.8	153	6.0	182	7.2	212	8.3	241	9.5	271	10.6	300	11.8	1.5	3.3	6.25	M6
UP1M 24	24	270	10.6	123	4.8			143	5.6	178	7.0	212	8.3	247	9.7	281	11.1	316	12.4	350	13.8	1.8	4.0	4.17	M6
UP1M 32	32	270	10.6	123	4.8			191	7.5	238	9.4	284	11.2	331	13.0	377	14.8	424	16.7	470	18.5	2.5	5.5	3.13	M6
UP1M 40	40	270	10.6	123	4.8			239	9.4	298	11.7	356	14.0	415	16.3	473	18.6	532	20.9	590	23.2	3.3	7.3	2.50	M6
UP1M 48	48	270	10.6	123	4.8			239	9.4	298	11.7	356	14.0	415	16.3	473	18.6	532	20.9	590	23.2	3.3	7.3	2.08	M6
UP1M 65	65	270	10.6	123	4.8			377	14.8	470	18.5	563	22.2	656	25.8							5.0	11.0	1.54	2xM6
UP1M 75	75	421	16.6	195	7.7			157	6.2	193	7.6	229	9.0									4.9	10.8	1.52	M8
UP1M 89	89	270	10.6	122	4.8			473	18.6	590	23.2	707	27.8	824	32.4							6.6	14.6	1.12	2xM6
UP1M 96	96	270	10.6	122	4.8			473	18.6	590	23.2	707	27.8	824	32.4							6.7	14.8	1.04	2xM6
UP1M 100	100	421	16.6	195	7.7			187	7.4	231	9.1	274	10.8									6.3	13.9	1.14	M8
UP1M 114	114	421	16.6	195	7.7			229	9.0	283	11.1	337	13.3									7.5	16.4	1.00	M10
UP1M 125	125	421	16.6	195	7.7			229	9.0	283	11.1	337	13.3									7.6	16.8	0.91	M10
UP1M 140	140	421	16.6	195	7.7			253	10.0	313	12.3	373	14.7									8.2	18.1	0.81	M10
UP1M 150	150	421	16.6	195	7.7			253	10.0	313	12.3	373	14.7									8.4	18.5	0.76	M10
UP1M 170	170	421	16.6	195	7.7			305	12.0	378	14.9	451	17.8									9.9	21.8	0.67	M10
UP1M 175	175	421	16.6	195	7.7			305	12.0	378	14.9	451	17.8									10.2	22.5	0.65	M10
UP1M 195	195	421	16.6	195	7.7			353	13.9	438	17.2	523	20.6									11.5	25.4	0.58	M10
UP1M 209	209	421	16.6	195	7.7			353	13.9	438	17.2	523	20.6									11.8	25.9	0.55	M10
UP1M 220	220	421	16.6	195	7.7			353	13.9	438	17.2	523	20.6									12.0	26.5	0.52	M10
UP1M 238	238	421	16.6	195	7.7	229	9.0	337	13.3													14.9	32.8	0.48	2xM10
UP1M 245	245	421	16.6	195	7.7	229	9.0	337	13.3													15.2	33.5	0.47	2xM10
UP1M 263	263	421	16.6	195	7.7	241	9.5	355	14.0													15.7	34.6	0.43	2xM10
UP1M 270	270	421	16.6	195	7.7	241	9.5	355	14.0													16.0	35.3	0.42	2xM10
UP1M 285	285	421	16.6	195	7.7	253	10.0	373	14.7													16.5	36.3	0.40	2xM10
UP1M 295	295	421	16.6	195	7.7	253	10.0	373	14.7													16.8	37.0	0.39	2xM10
UP1M 310	310	421	16.6	195	7.7	279	11.0	412	16.2													17.9	39.5	0.37	2xM10
UP1M 320	320	421	16.6	195	7.7	279	11.0	412	16.2													18.3	40.3	0.36	2xM10
UP1M 332	332	421	16.6	195	7.7	305	12.0	451	17.8													19.6	43.2	0.34	2xM10
UP1M 345	345	421	16.6	195	7.7	305	12.0	451	17.8													19.8	43.7	0.33	2xM10
UP1M 358	358	421	16.6	195	7.7	329	13.0	487	19.2													21.2	46.7	0.32	2xM10
UP1M 370	370	421	16.6	195	7.7	329	13.0	487	19.2													21.4	47.2	0.31	2xM10
UP1M 382	382	421	16.6	195	7.7	353	13.9	523	20.6													22.8	50.3	0.30	2xM10
UP1M 395	395	421	16.6	195	7.7	353	13.9	523	20.6													23.0	50.7	0.29	2xM10
UP1M 420	420	421	16.6	195	7.7	353	13.9	523	20.6													23.5	51.8	0.27	2xM10
UP1M 434	434	421	16.6	195	7.7	353	13.9	523	20.6													23.7	52.2	0.26	2xM10
UP1L 445	445	421	16.6	195	7.7	353	13.9	523	20.6													24.0	52.9	0.26	2xM10

Optimax

Physical properties M range

Cell Type	Capa- city	Height	Width	Length per block		Approx. Weight per cell	Internal Resis- tance	Bolt per pole
				1 cells				
	C _s Ah	mm	in	mm	in	kg	lb	mOhm
UP1M 461	461	411	16.2	195	7.7	206	8.1	26.4 58.2 0.25 3xM10
UP1M 475	475	411	16.2	195	7.7	206	8.1	27.0 59.5 0.24 3xM10
UP1M 490	490	411	16.2	195	7.7	219	8.6	28.2 62.2 0.23 3xM10
UP1M 502	502	411	16.2	195	7.7	232	9.1	29.5 65.0 0.23 3xM10
UP1M 517	517	411	16.2	195	7.7	232	9.1	30.4 67.0 0.22 3xM10
UP1M 530	530	411	16.2	195	7.7	243	9.6	31.0 68.3 0.22 3xM10
UP1M 540	540	411	16.2	195	7.7	243	9.6	31.4 69.2 0.21 3xM10
UP1M 553	553	411	16.2	195	7.7	244	9.6	31.6 69.7 0.21 3xM10
UP1M 569	569	411	16.2	195	7.7	244	9.6	32.6 71.9 0.20 3xM10
UP1M 590	590	411	16.2	195	7.7	268	10.6	34.5 76.1 0.19 3xM10
UP1M 604	604	411	16.2	195	7.7	268	10.6	34.5 76.1 0.14 3xM10
UP1M 620	620	411	16.2	195	7.7	268	10.6	34.9 76.9 0.18 3xM10
UP1M 630	630	411	16.2	195	7.7	268	10.6	35.2 77.6 0.18 3xM10
UP1M 640	640	411	16.2	195	7.7	268	10.6	35.5 78.3 0.18 3xM10
UP1M 656	656	411	16.2	195	7.7	268	10.6	35.4 78.0 0.17 3xM10
UP1M 675	675	411	16.2	195	7.7	268	10.6	36.0 79.4 0.17 3xM10
UP1M 690	690	411	16.2	195	7.7	305	12.0	39.6 87.3 0.17 4xM10
UP1M 715	715	411	16.2	195	7.7	317	12.5	41.6 91.7 0.16 4xM10
UP1M 740	740	411	16.2	195	7.7	328	12.9	42.8 94.4 0.15 4xM10
UP1M 752	752	411	16.2	195	7.7	317	12.5	44.2 97.4 0.15 4xM10
UP1M 772	772	411	16.2	195	7.7	329	13.0	43.1 95.0 0.15 4xM10
UP1M 785	785	411	16.2	195	7.7	353	13.9	46.0 101.4 0.15 4xM10
UP1M 810	810	411	16.2	195	7.7	328	12.9	44.1 97.2 0.14 4xM10
UP1M 835	835	411	16.2	195	7.7	341	13.4	45.9 101.2 0.14 4xM10
UP1M 860	860	411	16.2	195	7.7	353	13.9	47.5 104.7 0.13 4xM10
UP1M 885	885	411	16.2	195	7.7	353	13.9	48.0 105.8 0.13 4xM10
UP1M 915	915	411	16.2	195	7.7	402	15.8	53.5 117.9 0.12 5xM10
UP1M 935	935	411	16.2	195	7.7	413	16.3	54.4 119.9 0.12 5xM10
UP1M 960	960	411	16.2	195	7.7	388	15.3	53.2 117.3 0.12 5xM10
UP1M 985	985	411	16.2	195	7.7	438	17.2	57.5 126.8 0.12 5xM10
UP1M 1000	1000	411	16.2	195	7.7	407	16.0	55.6 122.6 0.11 5xM10
UP1M 1030	1030	411	16.2	195	7.7	413	16.3	56.4 124.3 0.11 5xM10
UP1M 1080	1080	411	16.2	195	7.7	438	17.2	60.1 132.5 0.11 5xM10
UP1M 1130	1130	411	16.2	195	7.7	498	19.6	65.9 145.3 0.10 6xM10
UP1M 1180	1180	411	16.2	195	7.7	473	18.6	65.2 143.7 0.10 6xM10
UP1M 1230	1230	411	16.2	195	7.7	492	19.4	67.6 149.0 0.09 6xM10
UP1M 1250	1250	411	16.2	195	7.7	498	19.6	68.7 151.5 0.09 6xM10
UP1M 1280	1280	411	16.2	195	7.7	511	20.1	70.5 155.4 0.09 6xM10
UP1M 1330	1330	411	16.2	195	7.7	523	20.6	72.0 158.7 0.09 6xM10



The block length and weight are determined by the number of cells in the block.
All tabulated dimensions are maximum values.

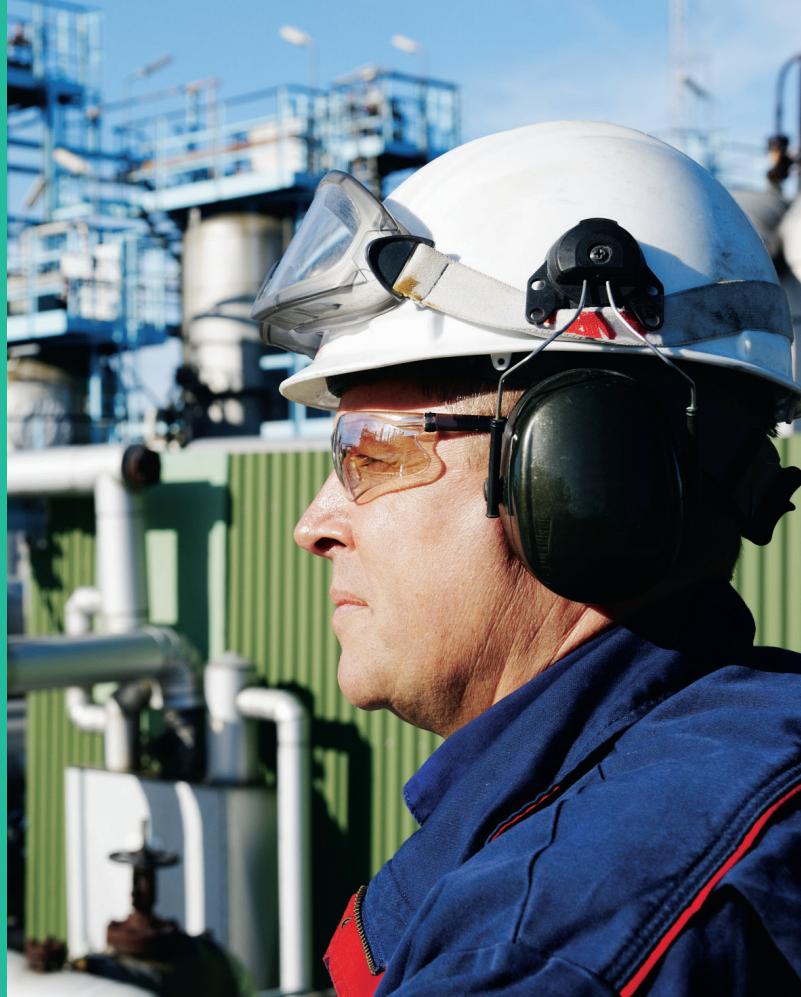
(1) Rigid connector included



Ni-Cd batteries have the smallest carbon footprint for lead-acid battery replacements, the lowest total cost of ownership, and they provide consistent performance even in the most challenging environments.

That's why Uptimax is the sustainable, reliable and economical choice.

We energize the world. On land, at sea, in the air and in space.



Our end-to-end application support

Our stationary battery experts can call upon a comprehensive range of skills and expertise to help our customers make the right choices.

Saft's end-to-end support begins at the design stage, where we help customers to find the ideal battery solution for their application by providing advice on important decisions such as battery sizing.

This support continues through the installation and commissioning phases of development. We also cover

support, maintenance, diagnostic services, and end-of-life recycling, and our suite of support even includes battery training seminars for consultants, engineering and maintenance departments.

To make sure our customers receive the optimum service, wherever they are in the world, we are continuing to expand and enhance our network of approved service stations in the Middle East, Asia and North America.

Get in touch to speak to our experts about the right battery for your application.

saft

26, quai Charles Pasqua
92300 Levallois-Perret - France
T. : +33 (0)1 58 63 16 00
F. : +33 (0)1 58 63 16 18
Saft une société de TotalEnergies
S.A.S. au capital de 26 724 876 €
R.C.S. Nanterre 481 480 465
Numéro de TVA FR 51 481 480 465
www.saft.com

Document N° 22151-2 0424
Edition: April 2024
Data in this document is subject to change
without notice and becomes contractual only
after written confirmation.
Photo credits: Saft, stock.adobe.com
© Saft


TotalEnergies