e.Z8

Industrial batteries for low
consumption and extremely long life

cecasa

cecasa
Z8
7,5/100C
7,5 V / 585Wh
ZINC AIR
ALKALINE
LASTS 8 TIMES MORE*
Pb
Z8
6/120
6 V / 624 Wh
Z8
1,5/1200
1,5 V / 1560 Wh
Z8
12/120
12 V / 1248 Wh
Z8
1,5/700
Z8
1,5/200
Z8
6/40
6 V / 208 Wh
Z8
6/50
6 V / 234 Wh

ZINC AIR ALKALINE

ZINC AIR ALKALINE is the ideal technology for those low power applications where continuous power is required and that works for long periods of time with no maintenance or supervision.

The only one that ensures maintenance-free battery durability for at least two years.

e.Z8

ZINC AIR Alkaline advantages

Power that lasts longer

The technology with the highest energy density on the market

ZINC AIR ALKALINE

eZ8 6/50
50 Ah

278 days

Jan | Feb | Mar
Apr | May | Jun
Jul | Aug | Sep
Oc

15 mA (Power consumption)
12 h ON (Operation)
15 mA x 12h/day = 180 mA/day

$\frac{50.000\ mA}{180\ mA/day}$ = **278 days**

OTHERS

4R25 Saline
7 Ah*

39 days

Jan | Fe

15 mA (Power consumption)
12 h ON (Operation)
15 mA x 12h/day = 180 mA/day

$\frac{7.000\ mA}{180\ mA/day}$ = **39 days**

* Although the label on a 4R25 saline battery usually states a capacity of 7 Ah, according to the tests carried out by specialised laboratories, the true capacity of a 4R25 saline battery is approximately 4.5 Ah, therefore the actual useful life is even shorter.

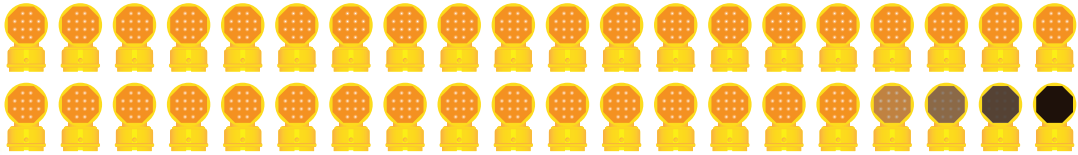
Ideal for working under severe weather conditions

Temperature range	-20ºC – 50ºC
Humidity range	25-85% RH

Environmentally friendly

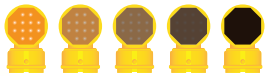
Free of heavy metals

Constant output voltage and longer duration



ZINC AIR ALKALINE

50 Ah • 270 Wh
5.4 V (Average Voltage)
Alkaline Technology



OTHERS

7 Ah • 31 Wh
4.4 V (Average Voltage)
Saline Technology

The only ones that guarantee 2 years of life

Minimum loss of capacity in stock:

After	Self-discharge
1 year	5%
2 years	8%

Maintenance-free and safe to handle

Ready to use
Works in any position.
Can be stacked.
No corrosive liquid spillage risk.

Suitable for working in explosive atmospheres

All of its components are non-flammable.
No gas emissions.

The best efficiency-price ratio

1 Cegasa ZINC AIR ALKALINE battery provides more energy than 8 batteries from other brands.
Fewer batteries, lower recycling costs.
Fewer batteries to transport and store.

100% Reliable

In terms of safety, it complies with numerous standards that guarantee its use in critical applications.
Manufactured in Spain under ISO 9001:2015 certification.

ZINC AIR ALKALINE

OTHERS

50 Ah • 270 Wh
5.4 V (Average Voltage)
1

=

x8 **7 Ah • 31 Wh**
4.4 V (Average Voltage)

Applications

Railway

We offer solutions to help improve signalling systems that control traffic and optimize safety. ZINC AIR ALKALINE batteries are specifically designed to power these devices for:

- Temporary speed limits
- Signal monitoring
- Train emergency lighting
- Level crossings

Electric fencing

The range of ZINC AIR ALKALINE batteries designed for this sector covers your specific needs, because being the longest lasting on the market they ensure your fences operate correctly without need of continuous supervision.

Applications

Road signs

We work together with the main manufacturers of road traffic control devices with the aim of providing the sector with specific products to improve road safety throughout the world.

- Mobile warning systems
- Flashing and fixed lighting
- Mobile LED devices

Navigation aid instruments

The characteristics of the ZINC AIR ALKALINE batteries protect the maritime and waterway sector, reliable high-performance, long-lasting power even in harsh weather conditions for optimal operation of navigation aid instruments, such as:

- Lighthouse emergency lighting
- Lighthouse and buoy lighting
- Maritime signalling lamps
- Radio beacons and transmission

Applications

Smart City

The need to improve the sustainability and efficiency of our cities has caused the digital transformation, and with it, the need to provide energy to all the offshored systems of the connected world. Cegasa eZ8 batteries provide a long-lasting, clean source of energy. The high-energy density allows our battery to provide a longer life, and the absence of heavy metals makes our product more respectful with the environment.

Alarms

Cegasa eZ8 batteries allow to power electronic equipment for long periods of time and without the need for any maintenance. In the alarm sector, our battery allows powering the system without the need for any other source of energy. In such a way that we can protect our properties, even if they do not have an electrical connection. Homes under construction, premises located in remote areas, temporary facilities, areas of works, scaffolding on facades, etc.

The Cegasa battery maintains a constant operating voltage throughout the entire period of its useful life, which allows it to meet the demands of electronic equipment and for it to reach its optimum performance.

Applications

IoT and telecommunications

The world is currently evolving towards the next big step in the technology industry: enabling the interconnectivity of any device to open up a world of infinite possibilities. At Cegasa we work to ensure that all of these devices are continuously connected and transmitting information.

Cegasa's ZINC AIR ALKALINE products are designed to provide every IoT application with the right amount of energy for optimum performance.

Portable LED lighting

The practicality of portable lighting devices improves when it offers sufficiently powerful, longer lasting light. That is why the combination of LED and ZINC AIR ALKALINE technologies is perfect to ensure a longer lasting torch and constant light that does not dim with use.

Parking meters and ticket machines

Cegasa ZINC AIR ALKALINE batteries provide these type of devices with the right amount of energy to stay connected and available for each transaction.

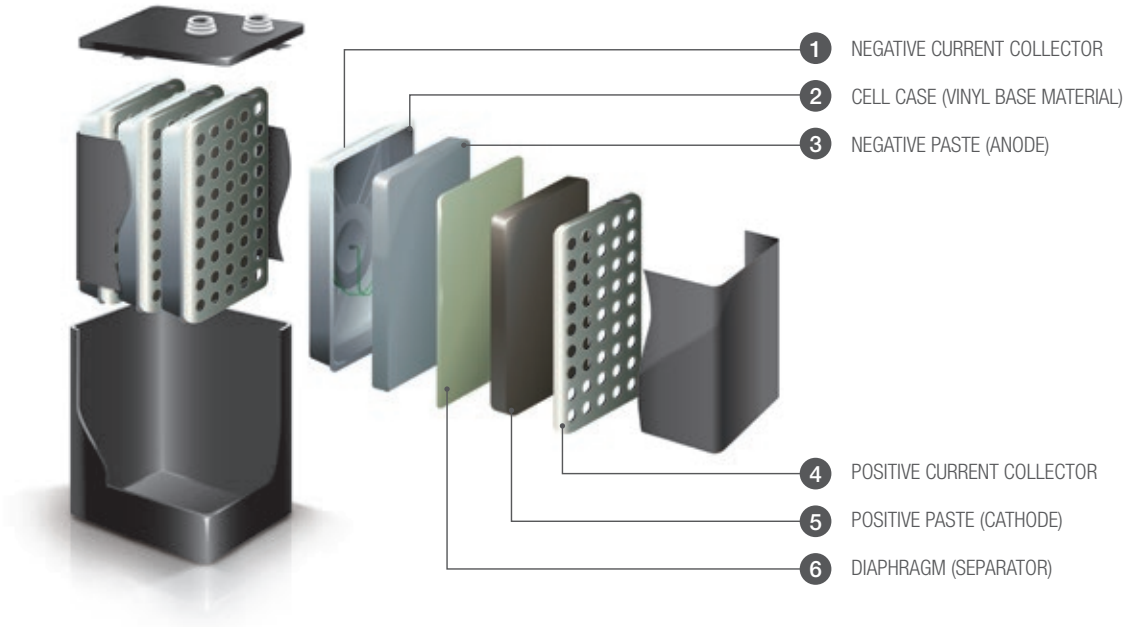
Its main advantage is that it needs no maintenance and can operate independently for long periods.

Cegasa **ZINC AIR Alkaline** batteries

ZINC AIR
ALKALINE

The batteries are made with a manganese dioxide cathode specially formulated by Cegasa and that is continuously regenerated using oxygen from the air. This means thatthe cells use a minimum amount of active cathodic material compared to other alkaline batteries from other manufacturers. The major advantage is that by storing a greater amount of anode material, they have more power.

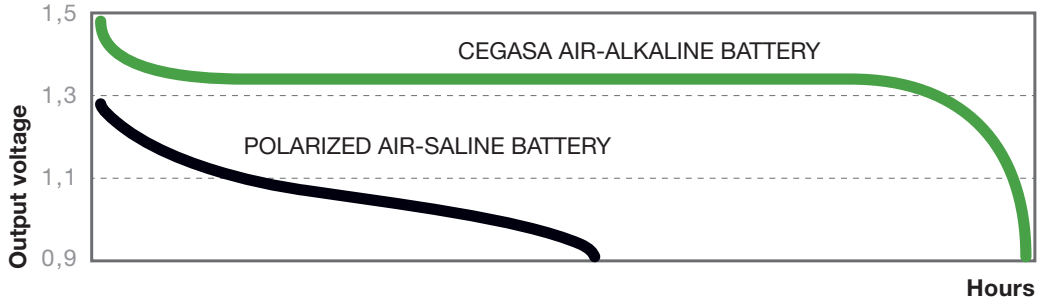
Resulting in Cegasa ZINC AIR ALKALINE batteries being the batteries with the highest capacity on the market.



CONSTANT OUTPUT VOLTAGE = CONSTANT PERFORMANCE

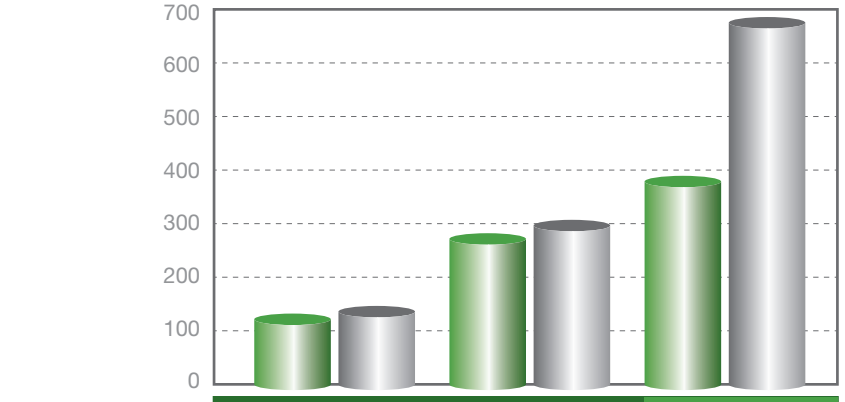
Cegasa technology ensures that the output voltage varies less than 2%, regardless of the battery's state of charge (SoC). This means that in applications such as signalling, light intensity is constant throughout the life of the battery and, unlike other technologies, does not reduce in intensity as the battery is discharged. Constant output voltage means constant performance for the battery's whole life, which increases its efficiency and reduces the number of batteries needed, minimizing the impact on the environment.

DISCHARGE CURVE



OUTSTANDING ENERGY DENSITY IN COMPARISON WITH OTHER TECHNOLOGIES. LIGHT, LONG LASTING, COMPACT BATTERY.

Cegasa's unique formulation makes it possible to offer a battery with outstanding energy density. Up to 5 times more power in the same space and lasting 8 times longer because, thanks to high output voltage stability regardless of the battery's state of discharge, this allows us to maximize the power in our battery. Other batteries stop providing a valid voltage even when they still have energy, with other solutions wasting as much as 30% of the battery's power.



	Depolarised air saline batteries	Other Alkaline-Air	Cegasa Zinc Air Alkaline
Watts-hour/kg.	140	260	377
Watts-hour/dm³	150	300	676

HARD WORKING CONDITIONS

Cegasa has developed a formulation solution and a build design for its ZINC AIR ALKALINE batteries to ensure they operate under extreme conditions. Battery integrity remains unaffected by low or high temperature climatic environments. Similarly, its design and production quality allow it to work under strong vibration.

NO INSTALLATION OR MAINTENANCE

Cegasa technology requires no maintenance. It has been developed so that it is ready to be used without requiring any additional care. The battery is supplied with the ventilation holes sealed, meaning that it does not start working until the seal is removed. It can be stored for two years with a minimum loss of capacity. Changing a discharged battery for a new one is very simple and does not require special skills.

RESPECT FOR THE ENVIRONMENT

Cegasa has developed a formulation that allows it to manufacture the battery without polluting nature. Unlike other technologies that use heavy metals such as Cadmium, Mercury or Lead, it does not include any type of highly polluting heavy metal. Our technology is totally environment-friendly.

SAFE TECHNOLOGY

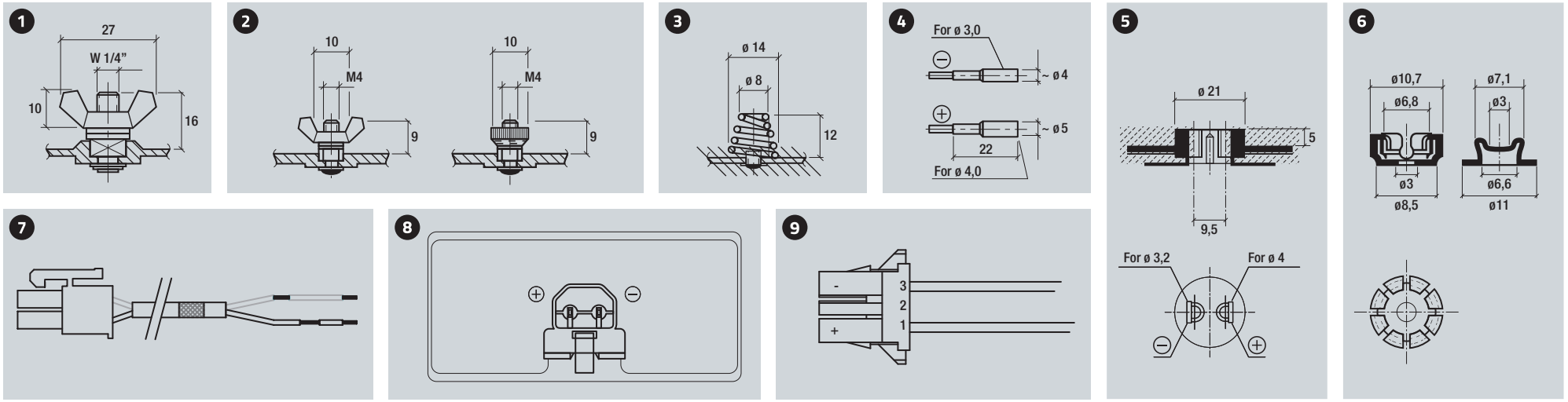
Cegasa's unique technology is totally safe. It is built by formulating elements in solid state, eliminating the risk of fluid leakage. The nature of its composition guarantees intrinsic safety with no risk of explosion or gas emissions. That is why our technology is not subject to any special shipping conditions such as ADR, IMDG, DGR, RID, AND, etc..

eZ8

Model	V	Ah	Wh	Max. intensity Continuous current (mA)	Max. intensity current intermittent (<1') (mA)	Max. intensity pulses (<1') (mA)	Connector	Dimensions	Units/box	Unit/pallet
eZ8 1,5/100	1,5	100	130	55	220	440	2	D	4	960
eZ8 1,5/200	1,5	200	260	110	440	880	2	D	4	960
eZ8 1,5/350	1,5	350	455	200	800	1600	2	E	12	288
eZ8 1,5/500	1,5	500	650	500	2000	4000	2	E	12	288
eZ8 1,5/600	1,5	600	780	250	1000	2000	1	F	4	320
eZ8 1,5/700	1,5	700	910	400	1600	3200	2	E	12	288
eZ8 1,5/1200	1,5	1200	1560	500	2000	4000	1	F	4	240
eZ8 1,5/2400	1,5	2400	3120	1000	4000	8000	1	G	2	120
eZ8 1,5/3600	1,5	3600	4680	1500	6000	12000	1	H	1	55
eZ8 1,5/4800	1,5	4800	6240	2000	8000	16000	1	I	1	60
eZ8 3/80	3	80	208	45	180	360	3	J	12	1344
eZ8 3/100	3	100	260	55	220	440	2	D	4	960
eZ8 3/180	3	180	468	90	360	720	7	K	10	600
eZ8 3/350	3	350	910	200	800	1600	2	E	12	288
eZ8 3/600	3	600	1560	250	1000	2000	1	F	4	240
eZ8 3/1200	3	1200	3120	500	2000	4000	1	P	2	120
eZ8 6/25	6	25	130	25	180	360	3	J	12	1344
eZ8 6/40P	6	40	208	45	180	360	6	L	12	720
eZ8 6/50	6	45	234	45	180	360	3	J	12	1344
eZ8 6/60	6	50	260	50	200	400	8	N	5	420
eZ8 6/90	6	90	468	50	200	400	2	N	5	420
eZ8 6/90C	6	90	468	50	200	400	2	C	4	168
eZ8 6/120	6	120	624	50	200	400	1	N	5	420
eZ8 6/140	6	140	728	100	400	800	8	N	5	420
eZ8 6/600	6	600	3120	250	1000	2000	1	G	2	120
eZ8 7,5/50	7,5	45	292,5	45	180	360	4	B	4	360
eZ8 7,5/75C	7,5	65	422,5	50	200	400	2	C	4	168
eZ8 7,5/100C	7,5	90	585	50	200	400	2	C	4	168
eZ8 9/55	9	45	351	50	200	400	4 7	B	4	360
eZ8 9/75	9	65	507	50	200	400	4 7	A/B	4	180/360
eZ8 9/100	9	90	702	50	200	400	4 7 9	A/B	4	180/360
eZ8 9/130	9	120	936	50	200	400	4 7 9	A/B	4	180/360
eZ8 9/150	9	150	1170	50	200	400	4 7 9	A/B	4	180/360
eZ8 9/170	9	165	1287	50	200	400	4 7	A	4	180
eZ8 9/200	9	180	1404	100	400	800	4 7	A	4	180
eZ8 9/350	9	350	2730	200	800	1600	2	Q	4	160
eZ8 9/600	9	600	4680	250	1000	2000	1	R	1	55
eZ8 12/60	12	60	624	50	200	400	4	B	4	360
eZ8 12/120	12	120	1248	100	400	800	2 4 5	O	4	288
eZ8 12/600	12	600	6240	250	1000	2000	1	I	1	60
eZ8 15/100	15	90	1170	100	400	800	2 4 5	O	4	288

Type of box	Dimensions
A	190x126x160
B	166x112x114
C	Ø180x171
D	Ø64x165
E	85x85x205
F	108x108x220
G	216x108x226
H	334x116x234
I	216x216x226
J	66x66x110
K	110x67x125
L	110x64,5x197
N	160x75x130
O	147,5x136x122
P	225x114x235
Q	256x85x221
R	334x114x234
S	332x332x232

Connectors



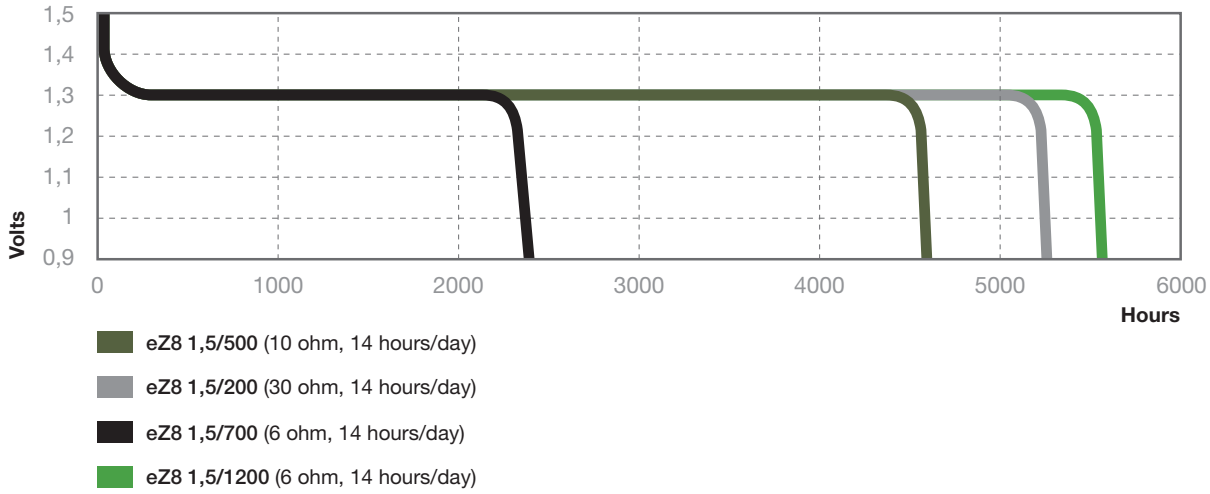
CUSTOM BATTERIES

If the standard models do not meet the specific needs of the application for which you want to use our eZ8, our R+D department is at your service to study your case and design a battery for you.

OEM & PERSONALISED PACKAGING

We specialise in the field of OEM products for our customers, as well as in different packaging options for added personalisation.

DISCHARGE CURVE GRAPH



100000604EN

cegasa

+85 YEARS OF ENERGY STORAGE EXPERIENCE

CEGASA, World's first producer of Zinc Air Alkaline industrial batteries.

- Specialising in the design and development of energy solutions for residential and industrial sectors.
- Experts in latest generation Lithium-Ion based energy accumulation technologies.
- Manufacturers of Lithium-Ion energy storage systems.
- A motivated, highly qualified team dedicated to quality and customer service.
- Own material characterisation laboratories.
- A national business group committed to innovation and sustainable development.

HEAD OFFICE & FACTORY

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