



Panasonic

POWER YOUR DAY



PANASONIC BATTERIES YOUR POWER PARTNER

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A Better Life, A Better World

Panasonic is committed to creating a better life and a better world, continuously contributing to the evolution of society and to the happiness of people around the globe.



Panasonic Worldwide Group

Worldwide leading corporation

Panasonic Corporation is one of the largest electronic manufacturers in the world. It manufactures and markets a wide range of products under the Panasonic brand to enhance and enrich lifestyles all around the globe.

Company name:	Panasonic Corporation
Head office location:	Osaka – Japan
President:	Kazuhiro Tsuga
Foundation:	March, 1918 (incorporated in December, 1935)
Net sales⁽¹⁾:	8,002.7 billion yen
Number of employees⁽¹⁾:	271,869
Number of consolidated companies⁽¹⁾:	582 (including parent company)

Panasonic - A powerful Global Brand

14th Best Regarded Company of the 2018 Forbes Global 2000 List ⁽²⁾

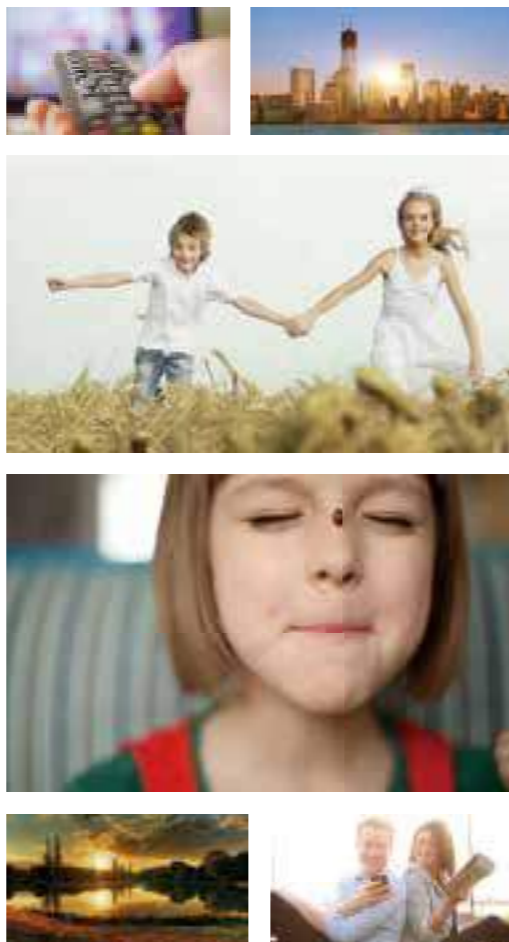
76th Best Global Brand 2018 ⁽³⁾

⁽¹⁾ as of March 31, 2019 ⁽²⁾ Source: www.forbes.com/top-regarded-companies/list ⁽³⁾ Source: www.interbrand.com

Creating New Life with Energy

Leading Energy Solutions for the Future

Panasonic's vision for the future centres on the need to develop products that offer greater convenience, a higher level of performance and improved environmental sustainability. And we're already delivering on that promise. Some recent examples include the supply of lithium-ion batteries for Tesla motors' electric vehicles, the development of industrial solutions & connected solutions such as in flight entertainment systems and also life solutions & appliances to support a better life, a better world.



A Change for the Better

Panasonic supports the technological leaders of today as a key partner in Electric Vehicle development and the sponsoring of events and teams in solar events around the world.



Electric Vehicle Race Partner

Panasonic supports the Ene-1 GP SUZUKA event by supplying 40 AA-size eneloop cells that power each student-designed vehicle.



Manned Flight Challenge

Tokai University aimed for a world record by flying about 3.6 km in an aircraft powered by 640 EVOLTA cells.

APPLIANCES

- Air-conditioning
- Small & Built-in Appliances
- Major Appliances
- TV, Imaging Network and Home Entertainment
- Smart Energy Systems

LIFE SOLUTIONS

- Lighting
- Panasonic Ecology Systems
- Energy Systems
- Housing Systems
- Panasonic Homes

CONNECTED SOLUTIONS

- Avionics
- Process Automation
- Media Entertainment
- Mobile Solutions
- Social Services, Logistics and Distribution

INDUSTRIAL SOLUTIONS

- Industrial Systems
- Consumer batteries

AUTOMOTIVE

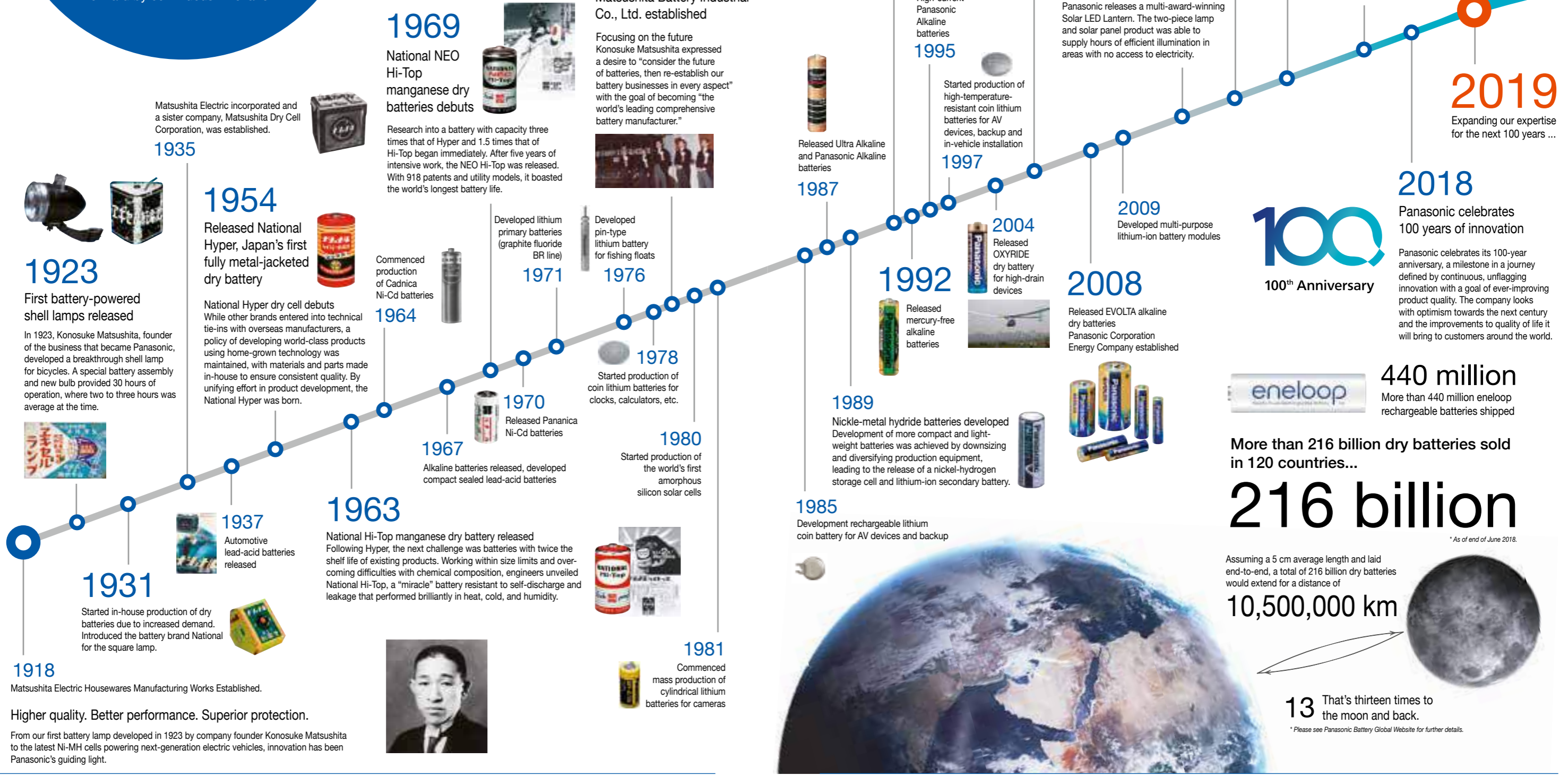
- Automotive Solutions
- Energy Devices

Historical highlights

Take a tour of the products and events that have helped to shape Panasonic's evolution as a world-leading brand, driven forward by continuous innovation.

Panasonic Energy Device Business Division plays a vital role in the business of Panasonic Corporation, a trusted brand that grew from battery production a century ago. Our unparalleled know-how is reinforced by a culture of continuous innovation to develop new products offering increasingly better quality. Sold all over the world, Panasonic batteries are now made in 19 facilities in 13 countries. As we look to the next 100 years with optimism, Panasonic affirms our commitment to innovation.

With a range of solutions to meet customers' needs in demanding applications and in any conditions, we continue to create new life with energy.



1923

First battery-powered shell lamps released

In 1923, Konosuke Matsushita, founder of the business that became Panasonic, developed a breakthrough shell lamp for bicycles. A special battery assembly and new bulb provided 30 hours of operation, where two to three hours was average at the time.



1931

Started in-house production of dry batteries due to increased demand. Introduced the battery brand National for the square lamp.



1918

Matsushita Electric Housewares Manufacturing Works Established.

Higher quality. Better performance. Superior protection.

From our first battery lamp developed in 1923 by company founder Konosuke Matsushita to the latest NI-MH cells powering next-generation electric vehicles, innovation has been Panasonic's guiding light.

1969

National NEO Hi-Top manganese dry batteries debuts

Research into a battery with capacity three times that of Hyper and 1.5 times that of Hi-Top began immediately. After five years of intensive work, the NEO Hi-Top was released. With 918 patents and utility models, it boasted the world's longest battery life.



1935

1954

Released National Hyper, Japan's first fully metal-jacketed dry battery

National Hyper dry cell debuts. While other brands entered into technical tie-ins with overseas manufacturers, a policy of developing world-class products using home-grown technology was maintained, with materials and parts made in-house to ensure consistent quality. By unifying effort in product development, the National Hyper was born.



1963

National Hi-Top manganese dry battery released. Following Hyper, the next challenge was batteries with twice the shelf life of existing products. Working within size limits and overcoming difficulties with chemical composition, engineers unveiled National Hi-Top, a "miracle" battery resistant to self-discharge and leakage that performed brilliantly in heat, cold, and humidity.



1979

Matsushita Battery Industrial Co., Ltd. established

Focusing on the future Konosuke Matsushita expressed a desire to "consider the future of batteries, then re-establish our battery businesses in every aspect" with the goal of becoming "the world's leading comprehensive battery manufacturer."



1964

Commenced production of Cadnica Ni-Cd batteries



1967

Alkaline batteries released, developed compact sealed lead-acid batteries



1971

Developed lithium primary batteries (graphite fluoride BR line)



1976

Developed pin-type lithium battery for fishing floats

1978

Started production of coin lithium batteries for clocks, calculators, etc.

1980

Started production of the world's first amorphous silicon solar cells



1981

Commenced mass production of cylindrical lithium batteries for cameras



1991

Mercury-free manganese batteries released



With growing awareness about the need for corporations to unite in an effort to reduce environmental impact, Panasonic forged partnerships with the US and Europe towards developing ecologically responsible products, leading the way with safe and eco-friendly mercury-free manganese batteries.

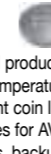
1987

Released Ultra Alkaline and Panasonic Alkaline batteries



1995

High-current Alkaline batteries



Started production of high-temperature-resistant coin lithium batteries for AV devices, backup and in-vehicle installation

1997

2004

Released OXYRIDE dry battery for high-drain devices



2008

Released EVOLTA alkaline dry batteries. Panasonic Corporation Energy Company established



1989

Nickel-metal hydride batteries developed. Development of more compact and light-weight batteries was achieved by downsizing and diversifying production equipment, leading to the release of a nickel-hydrogen storage cell and lithium-ion secondary battery.



1985

Development rechargeable lithium coin battery for AV devices and backup



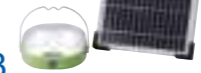
2005

Rechargeable eneloop released to the market



2013

Released solar LED lantern. Panasonic releases a multi-award-winning Solar LED Lantern. The two-piece lamp and solar panel product was able to supply hours of efficient illumination in areas with no access to electricity.



2014

Panasonic eneloop goes global. Rechargeable eneloop gains global distribution via the Panasonic network and sales continue to climb as consumers recognize the benefits of low cost and high performance.



2015

Solar storage system launches. Panasonic eneloop's most advanced, cost-effective portable device recharging solution and long-lasting solar LED light is launched with the specific objective of bringing safe and reliable light to people without electrical access.



2017

Released EVOLTA NEO batteries



2018

Panasonic celebrates 100 years of innovation



Panasonic celebrates its 100-year anniversary, a milestone in a journey defined by continuous, unflagging innovation with a goal of ever-improving product quality. The company looks with optimism towards the next century and the improvements to quality of life it will bring to customers around the world.

440 million

More than 440 million eneloop rechargeable batteries shipped



More than 216 billion dry batteries sold in 120 countries...

216 billion

* As of end of June 2018.

Assuming a 5 cm average length and laid end-to-end, a total of 216 billion dry batteries would extend for a distance of

10,500,000 km

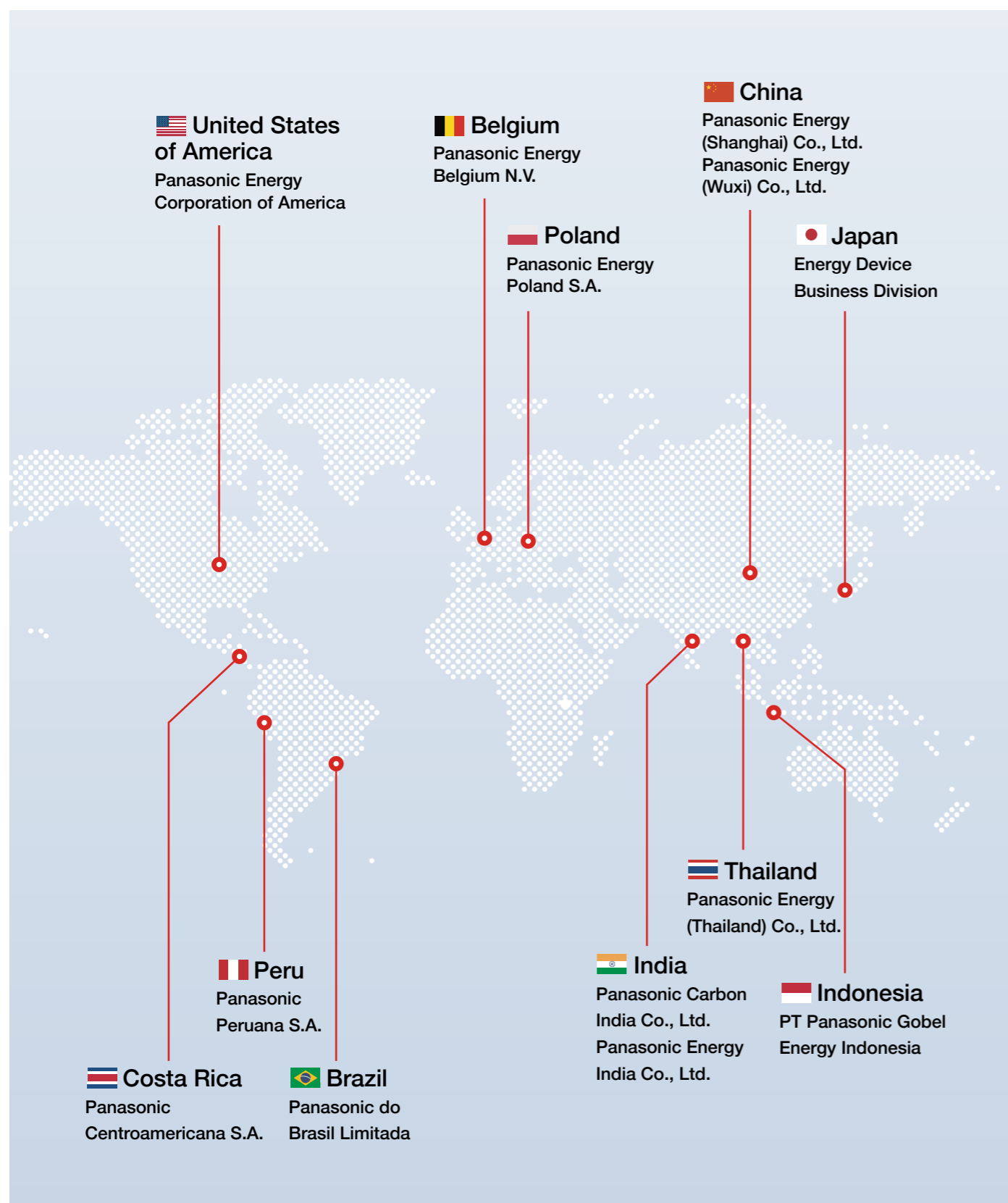


13 That's thirteen times to the moon and back.

* Please see Panasonic Battery Global Website for further details.

Panasonic Energy Divisions ⁽¹⁾ around the World

Inside Panasonic's Takumi Mind



(1) Divisions = Panasonic's own consumer battery factory.



Every aspect of our business, from research and development to production and quality control, is guided by the Takumi way. Takumi is Japanese for master craftsmanship, but it is more than that. They're artisans possessing an irreplaceable depth of experience that represents the sum of our knowledge in a specific area. Takumi are also responsible for building new technological developments into processes refined over decades, so that knowledge lives and grows. Takumi Mind balances experience with innovation as we strive to create batteries that make life better.

Technical Development Takumi
Thousands of prototypes, one winning formula



Of the infinite compositions that can comprise a battery's chemistry, it's the 87 years of accumulated knowledge inside a Takumi's head—and the thousands of prototype batteries they craft by hand—that decides the final formula used in our products. Takumi know-how joins with our suppliers' expertise as we develop unique materials to give Panasonic batteries an edge. Rather than relying on computer simulations, prototypes are exhaustively tested and promising designs refined to perfection. Panasonic honors Takumi spirit by continually deepening our knowledge pool with a commitment to surpass the world's best.

Production Takumi
Production Lines: Flowing Like Water



Quality starts at home. We designed more than 100 production lines in 13 factories to our specification, and have built some facilities from scratch. Factories are our value creators. The challenge is to constantly improve our production so it flows like water. There is still much to learn from our predecessors (some lines are still in operation 50 years on), yet quality can leap forward with the advent of new technology, such as AI and robotics. It's balancing traditional and modern, volume and quality, that Takumi guide us. Our facilities are designed around people so their knowledge can be enriched and passed on to the artisans that follow.

Quality Control Takumi
Challenge Zero: How We Prevent Defects



Our products are tested against JIS/IEC standards as well as our own more rigorous standards. Each year, hundreds of thousands of products are tested in every conceivable simulated usage condition, frequently based on customer feedback. We identify potential issues and counter before defects occur. We're aiming to achieve a 0% defect rate through over-engineering, severe testing, and quality control. For example, we claim 10 years storage life on selected products because we're still testing them in-house 20 years later. Some batteries in test-tanks are operable after 50 years. Our rigorous testing program proves our batteries really are ready to use, even after long years in storage.

*bring
Magic
alive*



Panasonic Energy Europe: Official Partner of *Cirque du Soleil*®

In 2018 Panasonic celebrated its 100 year anniversary and introduced the global “Bring Magic alive” campaign. As part of its “Bring Magic Alive” campaign, Panasonic teamed up with *Cirque du Soleil*® for a major European partnership.

WHY WE LOVE THE FIT WITH *CIRQUE DU SOLEIL*®

 Shared values with “BRING MAGIC ALIVE”	It all started with a dream ... (for both Panasonic and Cirque du Soleil)	Combining the unique design of <i>Cirque du Soleil</i> with Panasonic’s high performing batteries	Outstanding look & feel ideal in “reminder” category
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**MORE THAN YOU WOULD IMAGINE, *CIRQUE DU SOLEIL*®
IS USING BATTERIES IN THEIR SHOWS FOR:**

SOUND EQUIPMENT 	LIGHTING 	AUDIO 
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Panasonic Batteries and *Cirque du Soleil*® team up to power your day!



OFFICIAL PARTNER
TOURING SHOWS

CIRQUE DU SOLEIL®

TORUK
THE FIRST FLIGHT

INSPIRED BY
JAMES CAMERON'S
AVATAR

CIRQUE DU SOLEIL®
IN LAS VEGAS

THE PARTNERSHIP WITH *CIRQUE DU SOLEIL*® HELPS TO WIDEN PANASONIC’S APPEAL AND BUILD AWARENESS AND ENGAGEMENT FOR ITS EXTENSIVE BATTERY RANGE. THE PARTNERSHIP IS BEING BROUGHT TO LIFE THROUGH A RANGE OF DYNAMIC AND POWERFUL POS MATERIALS.

Dedicated battery packs 	Dedicated displays 	POS materials 
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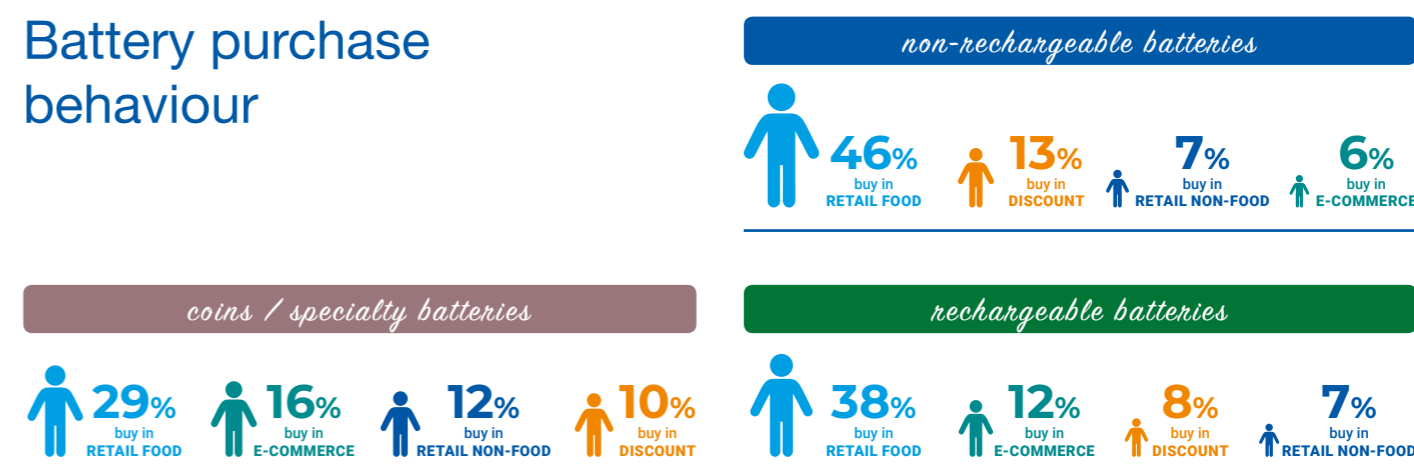
Note: The *Cirque du Soleil*® WIN campaign runs from May until December 2019. All info on cirquedusoleil.panasonic-batteries.com

Shopper insights: Channel Approach

To increase customer satisfaction and to put a smile on the face of consumers, Panasonic is developing specific approaches per channel, based on the needs and purchase behaviour of consumers.

If we look at the different channels – Retail Food, Retail Non-Food, Discount and E-Commerce – we see that the consumers each have specific needs and purchase behaviours. To serve our customers and the consumers even better, we gather specific channel-based intelligence, and we integrate a specific approach per channel.

Battery purchase behaviour



Main decision criteria

<p style="text-align: center;">RETAIL NON-FOOD </p> <table style="width: 100%;"> <tr> <td style="width: 50%;">NON-RECHARGEABLE</td> <td style="width: 50%;">RECHARGEABLE</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Performance claim • Battery technology • Price • Appliances </td> <td> <ul style="list-style-type: none"> • Cycle life • Capacity • Battery technology • Price • Appliances </td> </tr> </table>	NON-RECHARGEABLE	RECHARGEABLE	<ul style="list-style-type: none"> • Performance claim • Battery technology • Price • Appliances 	<ul style="list-style-type: none"> • Cycle life • Capacity • Battery technology • Price • Appliances 	<p style="text-align: center;">RETAIL FOOD </p> <table style="width: 100%;"> <tr> <td style="width: 50%;">NON-RECHARGEABLE</td> <td style="width: 50%;">RECHARGEABLE</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Price • Performance claim • Promotion • Appliances • Pack size </td> <td> <ul style="list-style-type: none"> • Cycle life • Capacity • Price • Battery technology • Appliances </td> </tr> </table>	NON-RECHARGEABLE	RECHARGEABLE	<ul style="list-style-type: none"> • Price • Performance claim • Promotion • Appliances • Pack size 	<ul style="list-style-type: none"> • Cycle life • Capacity • Price • Battery technology • Appliances
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<p style="text-align: center;">E-COMMERCE </p> <table style="width: 100%;"> <tr> <td style="width: 50%;">NON-RECHARGEABLE</td> <td style="width: 50%;">RECHARGEABLE</td> </tr> <tr> <td> <ul style="list-style-type: none"> • Price • Performance claim • Pack size • Appliances • Promotion </td> <td> <ul style="list-style-type: none"> • Cycle life • Capacity • Battery technology • Price • Appliances </td> </tr> </table>	NON-RECHARGEABLE	RECHARGEABLE	<ul style="list-style-type: none"> • Price • Performance claim • Pack size • Appliances • Promotion 	<ul style="list-style-type: none"> • Cycle life • Capacity • Battery technology • Price • Appliances 	<p style="text-align: center;">DISCOUNT </p> <table style="width: 100%;"> <tr> <td style="width: 50%;">NON-RECHARGEABLE</td> <td style="width: 50%;"></td> </tr> <tr> <td> <ul style="list-style-type: none"> • Price • Pack size • Promotion • Performance claim • Appliances </td> <td style="text-align: center;">  </td> </tr> </table>	NON-RECHARGEABLE		<ul style="list-style-type: none"> • Price • Pack size • Promotion • Performance claim • Appliances 	
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Source: PECE consumer/shopper researches 2009-2018

Panasonic Energy Europe, your Professional Battery Partner

Panasonic Energy Europe: Headquarters

Panasonic Energy Europe is the European headquarters for consumer batteries and responsible for marketing, sales and distribution of consumer batteries for the whole of Europe. Panasonic Energy Europe is an important division of the Japanese company Panasonic Corporation, which is one of the largest and leading electronic manufacturers in the world.

Since our foundation in 1918 Panasonic is recognized as an energetic, creative and proactive organization that consistently aims to exceed its customer's expectations, to translate its vision into providing products and solutions based on ideas that will enrich people's lives around the world through innovative thinking.



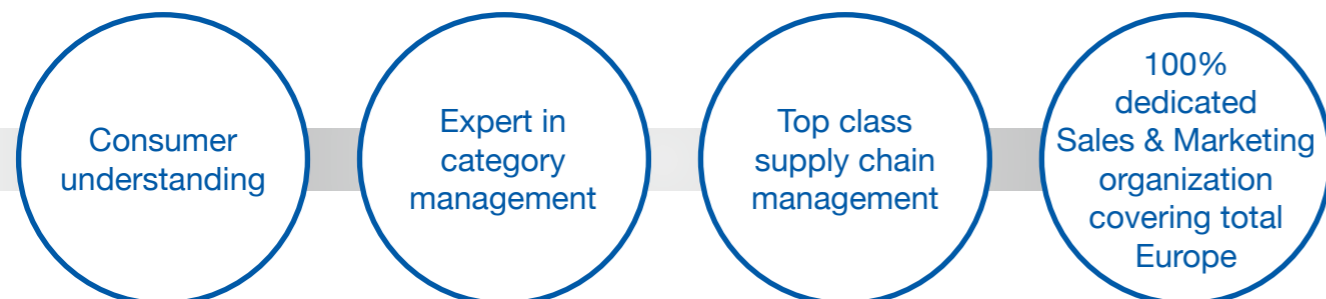
Our Mission

Being a leader in the **consumer battery category**, our **team** is passionate to bring as a **trusted partner**, expertise and superior **solutions** to our **individual customers** to achieve their **specific business needs**.

Our ultimate reward is to put a **smile on the consumer's face** as they **enjoy** our **top performing products**.

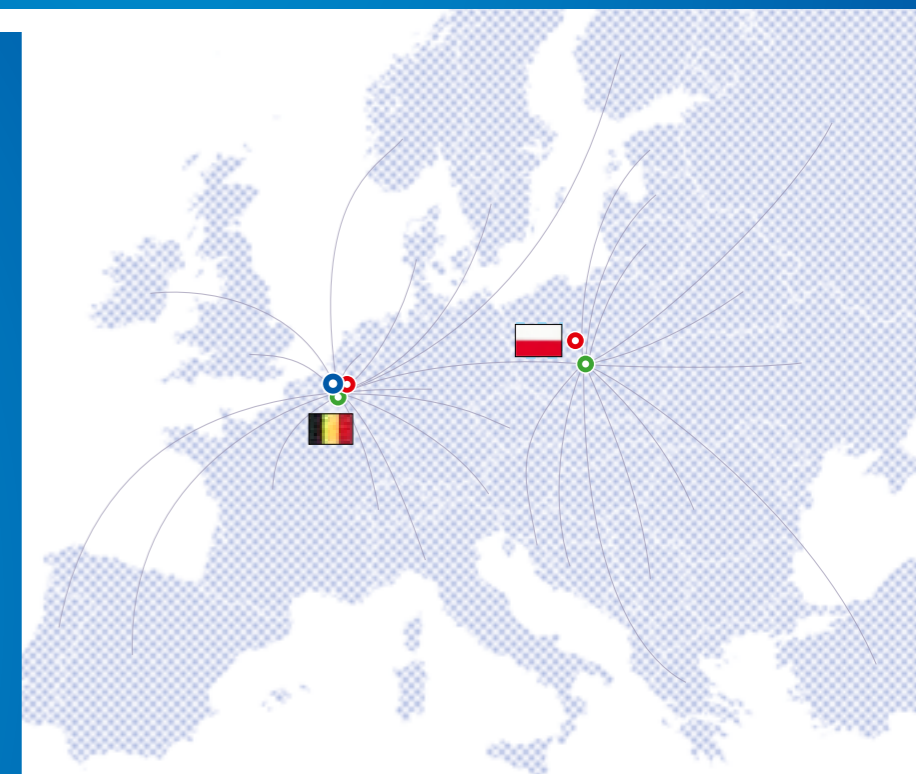


Panasonic Energy Europe, your Professional Battery Partner



An Organization 100% Dedicated to Batteries

- **BUSINESS :**
a battery dedicated company
- **INTEGRATION :**
unified production, logistics and sales support
- **LOCAL MANUFACTURING :**
two European production sites:
- local flexibility and short delivery times
- in line with EU quality and environmental standards
- **DISTRIBUTION :**
- European distribution centres in Belgium and Poland



- Panasonic Energy Europe nv - HQ
- Panasonic Battery Factory
- Panasonic European Distribution Centre

A CLOSER LOOK AT OUR FACTORIES



BELGIUM FACTORY

Located in: Tessenderlo, Belgium
Established in: September 29th 1970
Number of employees: 360 employees



Highly automated production of batteries using renewable energy.

POLAND FACTORY

Located in: Gniezno, Poland
Established in: December 15th 1993
Number of employees: 385 employees

Highly automated production of zinc carbon and alkaline batteries, based on Panasonic's latest sustainable technologies, which gives high precision and accuracy to the battery manufacturing process.



Also check our PECE movie on YouTube: <https://youtu.be/0XEUJPjSRi4>.

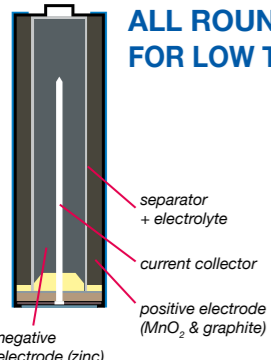
Panasonic Energy Europe:

Technical Expertise

NON-RECHARGEABLES (PRIMARY)

ALKALINE (p. 20-25) 1.5V/4.5V/9V

ALL ROUND BATTERY FOR LOW TO HIGH DRAIN APPLIANCES



- Technology developed in 1957
- Negative electrode = zinc gel + additives
- Positive electrode = high density MnO₂
- Electrolyte inside the separator for smoother reaction
- Advanced structure with more components vs. zinc

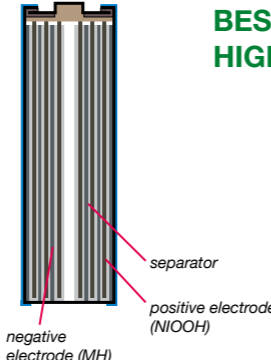
4 Panasonic grades, specific for every type of appliances

EVOLTA	High premium grade, especially designed to ensure optimal performance for highest drain appliances.
Pro Power	Premium grade, developed to provide reliable and dependable power for all middle to high drain appliances.
Everyday Power	Performs well in devices with low and continuous energy consumptions.
Alkaline Power	Provides energy for your basic needs.

RECHARGEABLES (SECONDARY)

Ni-MH (p. 26-35) 1.2V

BEST SOLUTION FOR HIGH DRAIN APPLIANCES



- Technology developed in 1989
- Coiled positive electrode, separator and negative electrode results in less internal resistance

4 Panasonic grades, specific for every type of appliances

Ready to Use min. 2450mAh (AA) min. 900mAh (AAA)	Optimal for heavy users who need batteries frequently for high drain consuming devices.
Ready to Use min. 1900mAh (AA) min. 750mAh (AAA)	Ready to use, designed for frequent use, in high to medium appliances which need frequent recharging.
Ready to Use min. 1000mAh (AA) and telephone batteries	Ready to use, designed for occasional use or use in appliances which undergo frequent or constant charging – especially DECT phones.
High Capacity Avg. 2700 mAh (AA) Avg. 1000 mAh (AAA)	Perfect batteries for appliances in need of very high power.

ECO-FRIENDLY: rechargeable up to 1000 times⁽¹⁾ and more

SPECIALTY BATTERIES (DRY-CELL – PRIMARY)

COIN LITHIUM (p. 38-39) 3V

IDEAL BATTERY FOR SMALL, ENERGY-HUNGRY APPLIANCES



- High energy density
- Long storage life
- No deterioration
- Low self discharge
- Positive electrode = lithium
- Negative electrode = MnO₂
- Suitable for high drain, low drain, pulsed devices

lithium based

MICRO ALKALINE (p. 42-43) 1.5V/12V

ALL ROUND COIN BATTERY FOR LOW TO HIGH DRAIN APPLIANCES



- **Equal construction as standard size alkaline battery**
- Stable discharge
- Excellent leakage resistance
- Negative electrode = zinc
- Positive electrode = MnO₂

zinc based

CYLINDRICAL LITHIUM (p. 40-41) 3V/6V

PREMIUM LITHIUM BATTERY FOR ENERGY-HUNGRY APPLIANCES



- 3 to 5 times higher energy density than standard size alkaline batteries
- Excellent performance in extreme temperatures (-40°C to +70°C)
- Positive electrode = lithium
- Negative electrode = MnO₂

*example shown: CR-123
lithium based

SILVER OXIDE (p. 44-45) 1.55V/6.2V

PREMIUM COIN BATTERY FOR LOW TO HIGH DRAIN APPLIANCES



- Higher energy density
- Stable discharge
- Excellent leakage resistance
- Negative electrode = zinc
- Positive electrode = silver oxide
- Extra alkaline electrolyte

zinc based

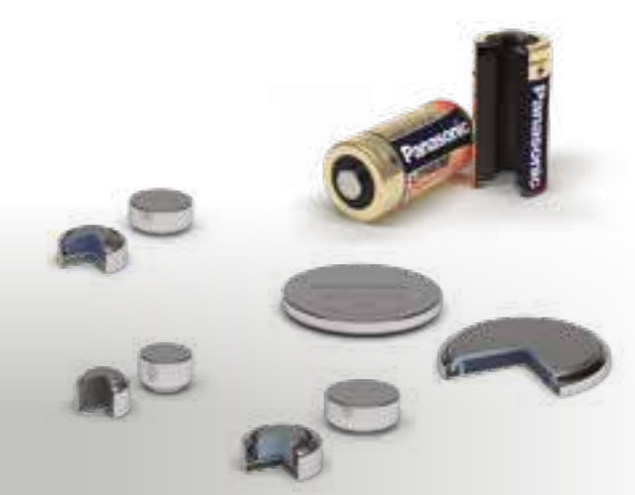
ZINC AIR (p. 46-47) 1.4V

EXCELLENT FOR HEARING AID



- Highest energy density of all electrochemical systems
- Chemical reaction with oxygen activates the battery
- Only 1 of the active materials inside the battery
- Negative electrode = zinc

zinc based



(1) Panasonic internal testing IEC61951-2 2011(7.5.1.3) on AA 1900 mAh; 500 cycles according to IEC61951-2 2017(7.5.1.4).

The Pinnacle of Alkaline Battery Technology

Panasonic's focus on research and development has helped to produce best in class alkaline batteries thanks to three unique technologies: Anti-Leak Protection to prevent damage to appliances, Triple Tough Coating to reduce contact resistance for greater reliability, and Extra Power Formula to maintain power for longer in high-drain devices. Our alkaline family has improved resistance to impact and short-circuit, and delivers high performance with industry-leading safety levels. For endurance and reliability in high-current applications, Panasonic is clearly the best choice.



Protect Your Precious Appliances

Unique Gas-Suppression Technology

Panasonic Alkaline cells feature advanced Anti-Leak Protection that suppresses the buildup of gas when a battery is over-discharged or stored for a long period. Less pressure means less chance of structural failure and rupture, and protects your valuable appliances from damage.



Store Batteries Safely for Up to 10 Years⁽²⁾

You can depend on Panasonic Alkaline batteries to retain high power performance even after very long period in storage. High-quality materials work to prevent degradation while Anti-Leak Protection minimizes the chance of leakage to ensure long-life stability before and during usage.



PANASONIC BATTERIES PERFORM BEST IN INDEPENDENT LEAK TESTING

Independent testing for battery leakage resistance, conducted by leading certifications laboratory Intertek, has proven Panasonic Alkaline batteries are the most resistant to leaks in high-temperature and high-humidity conditions when the battery is in an unused state after a long period in storage.
* Tested by Intertek under specified high-temperature, high-humidity conditions. Panasonic interpreted results according to in-house standards.

Quality & Performance Mark for EVOLTA



Note: Pro Power battery also certified

For more information about Intertek testing, visit the Intertek website.

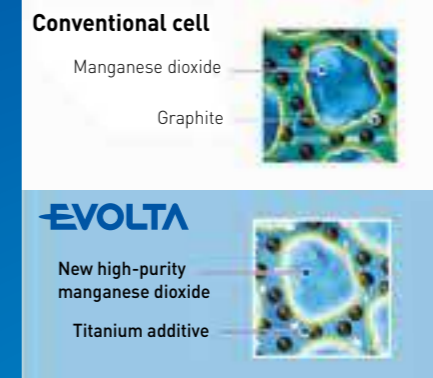


EVOLTA's Technical Innovations



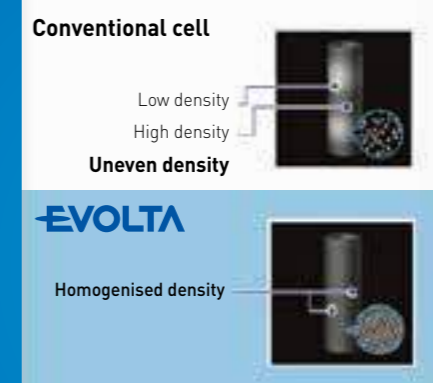
Material Evolution

Thanks to combining exclusive high-reactive ingredients (such as titanium) and high-purity manganese dioxide, the EVOLTA battery succeeds to generate extra voltage for power-hungry devices.



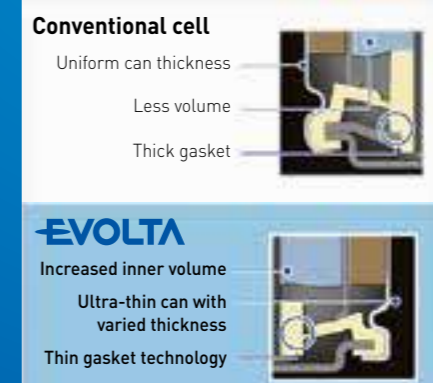
Engineering Evolution

With an homogenised filling density inside the EVOLTA batteries, the current is allowed to flow with much greater consistency, keeping these batteries working when competition has given up.



Structural Evolution

Longer lasting performance is achieved thanks to an improved structural design allowing more space for active ingredients. A strong internal structure and a tough outer coating ensures far better impact resistance.



All these technical innovations make EVOLTA the ULTIMATE LONG LASTING BATTERIES

(1) If used correctly (see backside of the blister)

(2) Keeps energy for up to 10 years when not used (LR03 - LR6 - LR14 - LR20). Not valid for AP6.

EVOLTA



The **EVOLTA** concept was born from a combination of “evolution” and “voltage” (power) and our technology has grown to become respected throughout the industry. **EVOLTA** has the ultimate long lasting energy and consistently outperforms our competitors’ premium products in commonly accepted independent performance tests.

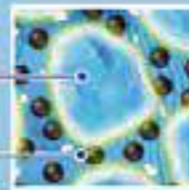


ULTIMATE LONG LASTING ENERGY

3 Technological Evolutions

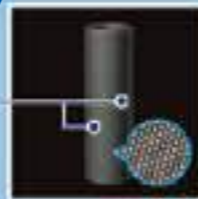
Material Evolution

New high-purity manganese dioxide
Titanium additive



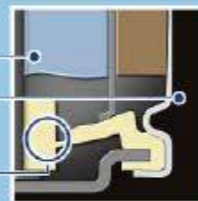
Engineering Evolution

Homogenised density



Structural Evolution

Increased inner volume
Ultra-thin can with varied thickness
Thin gasket technology



Specifications:

STANDARD BLISTERS

Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Bundle	Bundles/ Pallet
LR03 / AAA	5410853044840	LR03EGE/2BP	2	12	5	164
	5410853044871	LR03EGE/4BP	4	12	5	164
	5410853044826	LR03EGE/6BP 4+2F	6	12	-	410
LR6 / AA	5410853044758	LR6EGE/2BP	2	12	5	114
	5410853044789	LR6EGE/4BP	4	12	5	114
	5410853044734	LR6EGE/6BP 4+2F	6	12	-	216
LR14 / C	5410853045137	LR14EGE/2BP	2	12	5	75
LR20 / D	5410853045120	LR20EGE/2BP	2	12	5	40
6LR61 / 9V	5410853045144	6LR61EGE/1BP	1	12	5	84



EASY OPENING

WIDE BLISTERS

Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Pallet
LR03 / AAA	5410853044796	LR03EGE/8BW 4+4F	8	12	360
	5410853059226	LR03EGE/8BW 5+3F	8	12	360
	5410853044802	LR03EGE/8BW 6+2F	8	12	360
LR6 / AA	5410853044703	LR6EGE/8BW 4+4F	8	12	256
	5410853059219	LR6EGE/8BW 5+3F	8	12	256
	5410853044710	LR6EGE/8BW 6+2F	8	12	256



POWER PROTECTION FOR UP TO **10 YEARS**⁽¹⁾ IN STORAGE

ANTI-LEAK PROTECTION⁽²⁾

(1) Keeps energy for up to 10 years when not used (LR03 - LR6 - LR14 - LR20).

(2) If used correctly (see backside of the blister)

EVOLTA is most suitable for:



* Not all of the above appliances are suitable for all battery sizes. Please check packaging first.

Pro Power



The **PRO POWER** battery offers premium energy for your personal appliances. It is developed to provide reliable and dependable power, any place and any time. With a complete product line up, the **PRO POWER** battery is ideal for high and medium drain appliances.

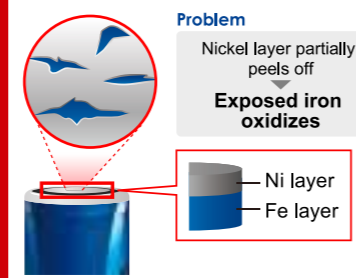


No Poor Connections, No More Stress

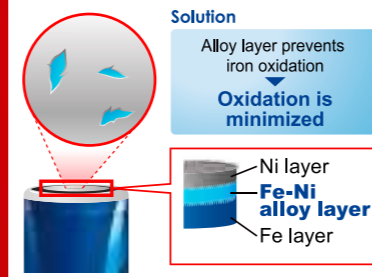
Triple Tough Coating for a Smooth Energy Flow

In conventional batteries, contact resistance on the terminals can build up and cause the nickel layer to peel off and the battery to fail. Triple Tough Coating solves this with an iron/nickel-plated alloy on the positive and negative terminals that improves adhesion and reduces contact resistance. The result? Enhanced energy flow and longer life.

Conventional Structure



Panasonic's Structure



TRIPLE TOUGH COATING

ADVANCED LONG LASTING ENERGY

POWER PROTECTION 10 YEARS⁽¹⁾
FOR UP TO 10 YEARS IN STORAGE

ANTI-LEAK PROTECTION⁽²⁾



(1) Keeps energy for up to 10 years when not used (LR03 - LR6 - LR14 - LR20).

(2) If used correctly (see backside of the blister)

Specifications:

STANDARD BLISTERS

Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Bundle	Bundles/ Pallet
LR03 / AAA	5410853040125	LR03PPG/2BP	2	12	5	164
	5410853039006	LR03PPG/4BP	4	12	5	164
	5410853040156	LR03PPG/6BP 4+2F	6	12	-	410
LR6 / AA	5410853039891	LR6PPG/2BP	2	12	5	114
	5410853038948	LR6PPG/4BP	4	12	5	114
	5410853039921	LR6PPG/6BP 4+2F	6	12	-	304
LR14 / C	5410853038917	LR14PPG/2BP	2	12	5	75
LR20 / D	5410853038887	LR20PPG/2BP	2	12	5	40
6LF22 / 9V	5410853038979	6LF22PPG/1BP	1	12	5	84
	5410853041573	6LF22PPG/2BP	2	12	5	84
3LR12 / 4.5V	5410853039037	3LR12PPG/1BP	1	12	4	80



EASY OPENING

WIDE BLISTERS

Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Pallet
LR03 / AAA	5410853040170	LR03PPG/8BW	8	12	360
	5410853059103	LR03PPG/8BW 5+3F	8	12	360
	5410853040194	LR03PPG/8BW 6+2F	8	12	360
	5410853048497	LR03PPG/10BW 6+4F	10	12	360
LR6 / AA	5410853058977	LR03PPG/16BW 10+6F	16	6	360
	5410853039945	LR6PPG/8BW	8	12	256
	5410853059097	LR6PPG/8BW 5+3F	8	12	256
	5410853039969	LR6PPG/8BW 6+2F	8	12	256
LR14 / C	5410853048480	LR6PPG/10BW 6+4F	10	12	256
	5410853058960	LR6PPG/16BW 10+6F	16	6	256
	5410853041504	LR14PPG/4BW	4	12	336
LR20 / D	5410853041481	LR20PPG/4BW	4	12	98



SPECIAL PACKS

Size	CSU EAN	Re-order N°	Batteries/ CSU	CSU's/ Carton	Cartons/ Pallet
LR03 / AAA	5410853040231	LR03PPG/12HH	12	24	156
	5410853040255	LR03PPG/12HH 8+4F	12	24	156
	5410853049487	LR03PPG/24CD	24	12	200
LR6 / AA	5410853058434	LR03PPG/30BB	30	12	192
	5410853040002	LR6PPG/12HH	12	20	140
	5410853040026	LR6PPG/12HH 8+4F	12	20	140
	5410853049463	LR6PPG/24CD	24	12	115
	5410853058373	LR6PPG/30BB	30	12	105

NEW!
FULL CARTON PACKAGING



Multiple use: in shelf, basket, bottom of shelf.

PRO POWER is most suitable for:



* Not all of the above appliances are suitable for all battery sizes. Please check packaging first.

Everyday Power



Panasonic's **EVERYDAY POWER** battery is an ideal power solution for commonly used devices. It provides reliable and dependable power. **EVERYDAY POWER** batteries have an excellent price versus quality ratio.



LONG LASTING ENERGY



POWER PROTECTION FOR UP TO **10 YEARS**⁽¹⁾ IN STORAGE

ANTI-LEAK PROTECTION⁽²⁾

(1) Keeps energy for up to 10 years when not used (LR03 - LR6 - LR14 - LR20).

(2) If used correctly (see backside of the blister)

Specifications:

STANDARD BLISTERS

Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Bundle	Bundles/ Pallet
LR03 / AAA	5410853024750	LR03EPS/2BP	2	12	5	164
	5410853048077	LR03EPS/4BP	4	12	5	164
LR6 / AA	5410853024705	LR6EPS/2BP	2	12	5	114
	5410853047964	LR6EPS/4BP	4	12	5	114
LR14 / C	5410853047827	LR14EPS/2BP	2	12	5	75
LR20 / D	5410853047810	LR20EPS/2BP	2	12	5	40
6LF22 / 9V	5410853047971	6LF22EPS/1BP	1	12	5	84



EASY OPENING

WIDE BLISTERS

Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Pallet
LR03 / AAA	5410853048015	LR03EPS/8BW	8	12	360
	5410853048008	LR03EPS/8BW 6+2F	8	12	360
	5410853049340	LR03EPS/10BW 6+4F	10	12	360
LR6 / AA	5410853048039	LR03EPS/16BW	16	6	360
	5410853047889	LR6EPS/8BW	8	12	256
	5410853047872	LR6EPS/8BW 6+2F	8	12	256
	5410853049326	LR6EPS/10BW 6+4F	10	12	256
	5410853047902	LR6EPS/16BW	16	6	256



NEW! FULL CARTON PACKAGING

SPECIAL PACKS

Size	CSU EAN	Re-order N°	Batteries/ CSU	CSU's/ Carton	Cartons/ Pallet
LR03 / AAA	5410853051770	LR03EPS/12HH	12	24	156
	5410853061953	LR03EPS/12HH 8+4F	12	24	156
	5410853047995	LR03EPS/24CD	24	12	200
LR6 / AA	5410853061618	LR03EPS/40CB	40	6	288
	5410853051763	LR6EPS/12HH	12	20	140
	5410853047926	LR6EPS/12HH 8+4F	12	24	156
	5410853047841	LR6EPS/24CD	24	12	112
	5410853061601	LR6EPS/40CB	40	6	156



EVERYDAY POWER is most suitable for:



* Not all of the above appliances are suitable for all battery sizes. Please check packaging first.






Ni-MH Rechargeable Ready to Use

Panasonic rechargeable batteries are ready to use immediately after purchase

(excluding Panasonic High Capacity range)



Why rechargeable batteries?

-  **ECO FRIENDLY**
-  **IDEAL FOR USAGE IN HIGH DRAIN APPLIANCES**
-  **LIFE EXPECTANCY**
Panasonic rechargeable batteries can be charged up to 1000 times⁽¹⁾.
-  **POWER CONSUMPTION**
During usage Panasonic rechargeable batteries offer a more steady flow of energy to the device than alkaline.
-  **COST SAVING**

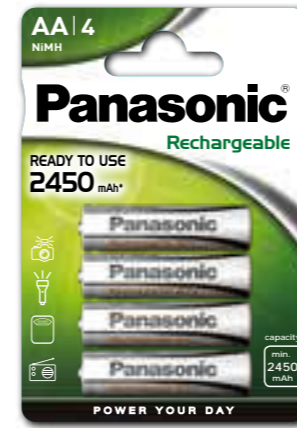


EU Directive

Rechargeable batteries put on the market from July 2012 onwards must comply with the capacity marking requirements of the EU Battery Directive 2006/66 (as amended). This means that the capacity has to be measured according to international standards and clearly mentioned on any rechargeable battery sold. All of our Panasonic rechargeable batteries comply with this capacity marking regulation because we are an honest and fully compliant supplier for your batteries.

⁽¹⁾ Panasonic internal testing IEC61951-2 2011(7.5.1.3) on AA 1900 mAh; 500 cycles according to IEC61951-2 2017(7.5.1.4).

Panasonic's Ready to Use rechargeable batteries



For **HEAVY** users



For **FREQUENT** users



For **OCCASIONAL** users



For **DECT** telephones

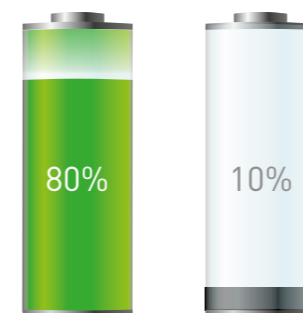
STAY CHARGED 1 YEAR⁽²⁾

ALL PANASONIC RECHARGEABLE BATTERIES ARE PRE-CHARGED AND STAY CHARGED UP TO 365 DAYS.⁽²⁾

READY TO USE AND IDEAL FOR REPEATED USE IN HIGH DRAIN DEVICES.

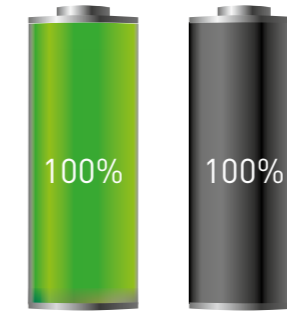
At purchase⁽³⁾

Ready to use



PANASONIC Rechargeables Regular Rechargeables

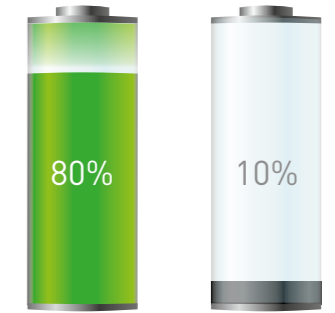
After charging



PANASONIC Rechargeables Regular Rechargeables

After 365 days non-usage⁽²⁾

Still ready to use



PANASONIC Rechargeables Regular Rechargeables

All ranges of Panasonic Ready to Use are pre-charged and stay charged up to 365 days.

⁽²⁾ Max. 80% after recharge. Under domestic storage conditions. Excluding D/C

⁽³⁾ Test conditions – internal Panasonic testing IEC - AA Ready to Use 1900mAh

Ready to Use

min. **2,450**_{mAh} (AA) - **900**_{mAh} (AAA)



FOR **HEAVY** USERS



Size	Min. capacity mAh	Cycle life	Self discharge after 1 year ⁽¹⁾
AA	2,450 mAh	Up to 500 times ⁽²⁾	80%
AAA	900 mAh	Up to 500 times ⁽²⁾	80%

Specifications:

STANDARD BLISTERS	Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Bundle
	AA	5410853050872	HHR-3XXE/2BC	2	12	5
	AA	5410853050865	HHR-3XXE/4BC	4	12	5
	AAA	5410853050896	HHR-4XXE/2BC	2	12	5
	AAA	5410853050889	HHR-4XXE/4BC	4	12	5



HHR-3XXE AA



HHR-4XXE AAA

Most suitable for:



PRODUCT BENEFITS

- Ready to use: you can use them immediately after purchase
- Stay charged: after 1 year⁽¹⁾
- High capacity: up to 6x longer lasting than Alkaline⁽²⁾
- Combines 'ready to use' with 'high capacity' at the same time
- Specially designed for consumers with a focus on power
- Provide an ideal power solution for frequently used high drain applications

UP TO **6X**⁽²⁾
LONG LASTING VS. ALKALINE

⁽¹⁾ Max. 80% after recharge. Under domestic storage conditions. Excluding D/C.

⁽²⁾ Panasonic internal testing IEC61951-2 2011(7.5.1.3); 150 cycles according to IEC61951-2 2017(7.5.1.4).

Ready to Use

min. **1,900**_{mAh} (AA) - **750**_{mAh} (AAA)



**FOR
FREQUENT
USERS**



HHR-3MVE
AA



HHR-4MVE
AAA

Most suitable for:



Size	Min. capacity mAh	Cycle life	Self discharge after 1 year ⁽¹⁾
AA	1,900 mAh	Up to 1,000 times ⁽²⁾	80%
AAA	750 mAh	Up to 1,600 times ⁽²⁾	80%



Specifications:

STANDARD BLISTERS

Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Bundle
AA	5410853045243	HHR-3MVE/2BC	2	12	5
AA	5410853045250	HHR-3MVE/4BC	4	12	5
AAA	5410853045267	HHR-4MVE/2BC	2	12	5
AAA	5410853045274	HHR-4MVE/4BC	4	12	5
C	5410853034537	HHR-2SRE/2B ⁽²⁾	2	12	5
D	5410853034520	HHR-1SRE/2B ⁽²⁾	2	12	5



PRODUCT BENEFITS

- Ready to use: you can use them immediately after purchase
- Stay charged: after 1 year⁽²⁾
- Combines the convenience of a disposable battery with the performance and cost benefits of a rechargeable battery
- Ideal for the frequent rechargeable battery user

**STAY
CHARGED
AFTER
1 YEAR⁽¹⁾**

⁽¹⁾ Max. 80% after recharge. Under domestic storage conditions. Excluding D/C.

⁽²⁾ Panasonic internal testing IEC61951-2:2011(7.5.1.3); 500 cycles according to IEC61951-2:2017(7.5.1.4).

Ready to Use

min. 1,000_{mAh} (AA) and telephone batteries



FOR OCCASIONAL USERS

Ready to Use 1000

Size	Min. capacity mAh	Cycle life	Self discharge after 1 year ⁽¹⁾
AA	1,000 mAh	Up to 2,100 times ⁽²⁾	80%

Telephone batteries

Size	Min. capacity mAh	Cycle life	Self discharge after 1 year ⁽¹⁾
AA	1,000 mAh	Up to 2,100 times ⁽²⁾	80%
AAA	750 mAh	Up to 1,600 times ⁽²⁾	80%



Specifications:

STANDARD BLISTERS	Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Bundle
	AA	5410853046011	HHR-3LVE/2BC	2	12	5
	AA	5410853045304	HHR-3LVE/4BC	4	12	5
	AAA	5410853045359	HHR-4MVE/2BD	2	12	5
	AAA	5410853045366	HHR-4MVE/3BD	3	12	5

READY TO USE 1000 PRODUCT BENEFITS

- Ready to use: you can use them immediately after purchase
- Stay charged: after 1 year⁽¹⁾
- Ideal for the occasional rechargeable battery user
- Long cycle life: up to 2,100 cycles

TELEPHONE BATTERIES PRODUCT BENEFITS

- Providing an ideal power solution for cordless communication appliances
- Packaging quantities in blister adapted to most frequently used appliances such as DECT phones or walkie talkies

(1) Max. 80% after recharge. Under domestic storage conditions. Excluding D/C.

(2) Panasonic internal testing IEC61951-2 2011(7.5.1.3); 900 cycles according to IEC61951-2 2017(7.5.1.4).



HHR-3LVE AA

Most suitable for:



High Capacity for High Drain Devices

Avg. 2,700 mAh – 1,000 mAh



**FOR
HIGH DRAIN
APPLIANCES**

Size	Min. capacity mAh	Cycle life
AA	2,500 mAh	Up to 300 times ⁽¹⁾
AAA	930 mAh	Up to 300 times ⁽¹⁾



Specifications:

STANDARD BLISTERS	Size	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Carton	Cartons/ Bundle
	AA	5410853052791	BK-3HGAE/2BE	2	12	5
	AA	5410853052807	BK-3HGAE/4BE	4	12	5
	AAA	5410853052821	BK-4HGAE/2BE	2	12	5
	AAA	5410853058687	BK-4HGAE/4BE	4	12	5
	AA	5410853052777	BK-3HGAE/BF1	1	500	-
	AAA	5410853052814	BK-4HGAE/BF1	1	500	-

PRODUCT BENEFITS

- Due to its high capacity, this is an ideal rechargeable battery for high drain appliances
- Excellent price versus quality ratio

HIGH CAPACITY

Capacity min.*1

2500 AA

mAh

Capacity min.*1

930 AAA

mAh

(1) Panasonic internal testing IEC61951-2:2011(7.5.1.3) on AA 1900 mAh (varies according to conditions of use).

HIGH CAPACITY BATTERIES are most suitable for:



BK-3HGAE
AA



BK-4HGAE
AAA

CHARGERS

5 YEAR WARRANTY

Smart & Quick charger – BQ CC55

- Rapid charge
- Individual management/charge control ("Smart Charge"⁽¹⁾)
- Can be used all over the world (100-240 V)
- Case color: white



Item	Specifications
Input	AC100-240V 50-60Hz
Input part Structure	Fixed plug
Charging control	Smart Charge ¹ / -ΔV / Timer
Indicator	LED x 4 Charging: ON, Fully charged: OFF
Charger battery	AA x 1, 2, 3, 4 / AAA x 1, 2, 3, 4 cells
Charging time ⁽²⁾	AA: Approx 1.5 hours / 3 hours [2,000 mAh] AAA: Approx 1.5 hours / 3 hours [800 mAh]
Charger size (W x H x D)	68 x 121 x 65.5 mm (EU) / 68 x 121 x 62 mm (UK)
Weight	with EU-plug: 124 g - with UK-plug: 132 g

⁽¹⁾This charger has "Smart Charge" function which checks voltage and temperature of battery automatically. Thanks to Smart Charge function, it saves time of charging and loss of energy & money.

PRODUCT BENEFITS

- Improved consumer communication, designed to aid product rotation
- Clear time indications and features
- Free 5 year warranty for added reassurance
- All chargers have lead-free soldering, less harmful for the environment
- Worldwide compatibility
- Safety: non rechargeable detection
- LED Timer ready indication
- For all Ni-MH batteries

Compact charger – BQ CC50

- Can charge AA / AAA 2 cells
- Can be used all over the world (100-240 V)
- Safety timer: max. 13h
- Case color: white

Item	Specifications
Input	AC 100-240 V 50-60 Hz
Input part Structure	Fixed plug
Charging control	Timer cut (13 hours) Individual
Indicator	LED x 2 Charging: ON, Fully charged: OFF
Charger battery	AA x 1, 2 / AAA x 1, 2 cells
Charging time ⁽²⁾	AA: Approx 10 hours; AAA: Approx 10 hours
Charger size (W x H x D)	50 x 121 x 66.2 mm (EU) / 50 x 121 x 61.2 mm (UK)
Weight	with EU-plug: 86 g - with UK-plug: 96 g



Advanced charger – BQ CC17

- Can charge AA / AAA 4 cells
- Can be used all over the world (100-240 V)
- Individual management/-ΔV Control
- Case color: white



Item	Specifications
Input	AC 100-240 V 50-60 Hz
Input part Structure	Fixed plug
Charging control	-ΔV /Timer
Indicator	LED x 4 Charging: ON, Fully charged: OFF
Charger battery	AA x 1, 2, 3, 4 / AAA x 1, 2, 3, 4 cells
Charging time ⁽²⁾	AA: Approx 7h [2,000 mAh]; AAA: Approx 6h [800 mAh]
Charger size (W x H x D)	65 x 105 x 70 mm
Weight	107,4 g

Universal charger – BQ CC15

- Can charge AA / AAA / C / D 1-4 cells
- Can charge 9V 1-2 cells
- Can be used all over the world (100-240 V)
- Automatic switch-off when charged (ΔV)
- Case color: white

Item	Specifications
Input	AC 100-240 V 50-60 Hz
Input part Structure	AC cable
Charging control	Timer cut (13 hours) Individual
Indicator	LED x 2 Charging: ON, Fully charged: OFF
Charger battery	AA x 1-4 / AAA x 1-4 / C x 1-4 / D x 1-4 / 9V x 1-2 cells
Charging time ⁽²⁾	AA: Approx 6 hours; AAA: Approx 6 hours
Charger size (W x H x D)	110 x 200 x 55 mm
Weight	with EU-plug: 489 g - with UK-plug: 499 g



Basic charger – BQ CC51

- Can charge AA / AAA 2 or 4 cells
- Can be used all over the world (100-240 V)
- Timer control
- Case color: white



Item	Specifications
Input	AC 100-240 V 50-60 Hz
Input part Structure	Fixed plug
Charging control	Timer cut (13 hours)
Indicator	LED x 2 Charging: ON, Fully charged: OFF
Charger battery	AA x 2, 4 / AAA x 2, 4 cells
Charging time ⁽²⁾	AA: Approx 10 hours; AAA: Approx 10 hours
Charger size (W x H x D)	66 x 108 x 65.5 mm (EU) / 66 x 108 x 62 mm (UK)
Weight	with EU-plug: 100 g - with UK-plug: 108 g

Specifications:

Charger	Re-order N° (Kit)	CSU EAN	Batteries included in kit	Blister size (mm) (W x H x D)	Blisters/ Carton
BQ-CC55	K-KJ55MGD40E	5410853057789	4x P6 1900	105 x 200 x 72	8
BQ-CC55	K-KJ55MGD40U	5410853057802	4x P6 1900	105 x 200 x 72	8
BQ-CC17	K-KJ17MGD40E	5410853057796	4x P6 1900	105 x 200 x 72	8
BQ-CC51	K-KJ51MGD42E	5410853056973	4x P6 1900 / 2x P03 750	105 x 200 x 72	8
BQ-CC51	K-KJ51MGD40U	5410853057819	4x P6 1900	105 x 200 x 72	8
BQ-CC50	K-KJ50LGA20E	5410853056966	2x P6 1900	105 x 200 x 72	8
BQ-CC15	BQ-CC15E	5025232672141	-	167 x 342 x 67	8

(2) AA/AAA 4 cells.

(3) AA/AAA 2 cells.

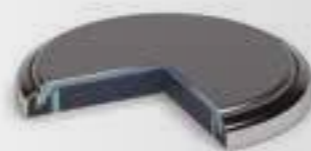
COIN LITHIUM

SPECIAL PANASONIC SEALING TECHNOLOGY

Ensure a low self discharge rate and high battery performance especially after storage.

LONG-TERM DISCHARGE

Reaction materials in lithium batteries are more stable than other batteries. To ensure longer service life, Panasonic evaluates its lithium batteries in all conditions over longer periods.



New child safety packaging

Lithium battery storage safety tips:

- Keep all batteries in a sealed container in a high cupboard.
- Keep products well out of reach if the battery compartment isn't secured.
- Put 'flat' or 'dead' batteries out of reach straight away and recycle safely.



Panasonic recommends to keep batteries out of children's reach. If you suspect your child has swallowed a lithium battery, act this:

- Take your child straight to hospital.
- Do not let your child eat or drink.
- Do not induce vomiting.

For more info, visit our website: www.panasonic-batteries.com

FOR LONG LASTING POWER



Specifications:

BLISTERS

Model N°	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Innercarton	Innercartons/ Bundle
CR1025	5410853010227	CR-1025EL/1B	1	12	10
CR1216	5410853010210	CR-1216EL/1B	1	12	10
CR1220	5019068085091	CR-1220EL/1B	1	12	10
CR1616	5019068085107	CR-1616EL/1B	1	12	10
CR1620	5025232068258	CR-1620EL/1B	1	12	10
CR1632	5410853038320	CR-1632EL/1B	1	12	10
CR2012	5410853038450	CR-2012EL/1B	1	12	10
CR2016	5019068085114	CR-2016EL/1B	1	12	10
	5025232060665	CR-2016EL/2B	2	12	10
	5410853059028	CR-2016EL/4B	4	12	10
	5410853043812	CR-2016EL/6BP	6	20	5
CR2025	5019068085121	CR-2025EL/1B	1	12	10
	5025232060672	CR-2025EL/2B	2	12	10
	5410853059035	CR-2025EL/4B	4	12	10
	5410853043829	CR-2025EL/6BP	6	20	5
CR2032	5019068085138	CR-2032EL/1B	1	12	10
	5025232060689	CR-2032EL/2B	2	12	10
	5410853058663	CR-2032EL/4B	4	12	10
	5410853043836	CR-2032EL/6BP	6	20	5
CR2354	5410853038481	CR-2354EL/1B	1	12	10
CR2430	5410853012313	CR-2430EL/1B	1	12	10
CR2450	5410853014355	CR-2450EL/1B	1	12	10



NEW child safety packaging

COIN LITHIUM is most suitable for:



HIGH VOLTAGE
Panasonic coin lithium batteries give more power with an output of 3V



-30 °C UP TO 60 °C
This battery offers reliable power even in a wide range of operating temperatures



UP TO 10 YEARS
These batteries can be stored for up to 10 years without use



ECO BENEFITS
Panasonic coin lithium batteries have 0% mercury added

CYLINDRICAL LITHIUM



**FOR LIGHT WEIGHT
APPLIANCES
THAT NEED POWER**



CR2



CR123



2CR5



CRP2



Example shown:
CR-123 battery

SAFETY GUARANTEE
Using 4 built-in safety features, Panasonic ensures a safe structure for its cylindrical lithium batteries and a power cut off in case of overload.

**EXCELLENT PERFORMANCE
IN EXTREME TEMPERATURES**
Thanks to the unique composition of lithium and manganese dioxide, this battery is able to function in extreme temperatures (-40°C to +70°C) without hesitance.

Specifications:

Model N°	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Innecarton	Innecartons/ Bundle
CR2	5025232016082	CR-2L/1BP	1	10	10
	5410853013464	CR-2L/2BP	2	10	10
CR123	5410853017097	CR-123AL/1BP	1	10	10
	5410853017110	CR-123AL/2BP	2	10	10
2CR5	5410853017158	2CR-5L/1BP	1	10	10
CRP2	5410853017134	CR-P2L/1BP	1	10	10

BLISTERS



**EASY
OPENING**

CYLINDRICAL LITHIUM
is most suitable for:



HIGHER ENERGY DENSITY
Due to lithium based reliable power

-40 °C UP TO 70 °C
Lithium batteries offer reliable power in extreme temperatures

UP TO 10 YEARS
These batteries can be stored for up to 10 years without use

RAPID FLASH RECOVERY TIME
Low internal resistance to provide rapid flash recovery and quick shooting

MICRO ALKALINE



**FOR SMALL
APPLIANCES
WITH LONG LASTING POWER**



LR41



LR44



LR1130



LRV08



LR1



STABLE DISCHARGE PERFORMANCE
Due to Panasonic's innovative techniques, our Micro Alkaline products are designed to guarantee optimal and stable discharge results, as well as excellent high-drain discharge characteristics.

OPTIMAL LEAKAGE RESISTANCE
As a result of our excellent sealing technique Panasonic Micro Alkaline batteries have an optimal leakage resistance.

Specifications:

BLISTERS

Model N°	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Innecarton	Innecartons/ Bundle
LR41	5410853061700	LR-41EL/1B	1	12	10
LR44	5019068083035	LR-44EL/1B	1	12	10
	5410853018469	LR-44EL/2B	2	12	10
	5410853049135	LR-44L/6BP	6	20	-
LR1130	5019068083011	LR-1130EL/1B	1	12	10
LRV08	5410853057345	LRV08L/1BE	1	10	10
	5410853057376	LRV08L/2BE	2	10	10
LR1	5019068592551	LR1L/1BE	1	10	10



MICRO ALKALINE
is most suitable for:



STABLE DISCHARGE
Optimal & stable discharge results and excellent high drain discharge characteristics



OPTIMAL LEAKAGE RESISTANCE
Designed to avoid leakage as a result of advanced sealing technique



ECO BENEFITS
Panasonic micro alkaline batteries have 0% mercury added



UP TO 3 YEARS
These batteries can be stored for up to 3 years without use

SILVER OXIDE



FOR **SMALL
HIGH DRAIN
APPLIANCES**



SR521



SR616



SR621



SR626



SR721



SR920



SR927



SR936



SR1130



SR41



SR44



4SR44

4SR44



HIGH ENERGY DENSITY

Panasonic's know-how in materials, such as antioxidant and high performance separators, results in a high energy density and improved storage characteristics.

CONSTANT VOLTAGE OUTPUT

A stable discharge performance can be guaranteed using silver as one of the active components within the button cell.

Specifications:

BLISTERS

Model N°	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Innecarton	Innecartons/ Bundle
SR521	5410853035466	SR-521EL/1B	1	12	10
SR616	5410853035473	SR-616EL/1B	1	12	10
SR621	5410853035480	SR-621EL/1B	1	12	10
SR626	5410853035497	SR-626EL/1B	1	12	10
SR721	5410853035503	SR-721EL/1B	1	12	10
SR920	5410853035527	SR-920EL/1B	1	12	10
SR927	5410853035534	SR-927EL/1B	1	12	10
SR936	5410853035541	SR-936EL/1B	1	12	10
SR1130	5410853035428	SR-1130EL/1B	1	12	10
SR41	5410853035435	SR-41EL/1B	1	12	10
SR44	5410853013976	SR-44EL/1B	1	12	10
4SR44	5410853013990	4SR44L/1BP	1	10	10



SILVER OXIDE
is most suitable for:



HIGH PERFORMANCE
Premium materials (silver) and construction (separator) ensures a high battery performance



ECO BENEFITS
Panasonic silver oxide batteries have 0% mercury added



STABLE DISCHARGE
Premium materials (silver) ensure a stable discharge performance



UP TO 3 YEARS
These batteries can be stored for up to 3 years without use

ZINC AIR



FOR **HEARING AID**



PR10



PR13



PR312



PR675



UNIQUE COMPOSITION

Zinc air batteries are unique within the Panasonic range, as only one of the active materials is inside the battery. When tearing off the tab, oxygen enters and activates the battery.

HIGHEST ENERGY DENSITY

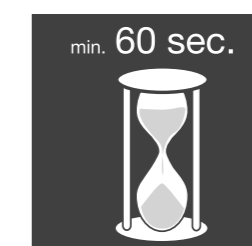
With the highest energy density of all electrochemical systems and due to their small size, these batteries are excellent to power small energy-hungry devices in need of continuous discharge.

Specifications:

BLISTERS	Model N°	CSU EAN	Re-order N°	Batteries/ Blister	Blisters/ Innecarton	Innecartons/ Bundle
	PR10 (PR230/PR536)	5410853057024	PR-10L/6LB	6	10	5
	PR13 (PR48)	5410853057017	PR-13/6LB	6	10	5
	PR312 (PR41)	5410853057031	PR-312/6LB	6	10	5
	PR675 (PR44)	5410853057048	PR-675/6LB	6	10	5

Compact sized blisters. Easy to stow away; fits in purse or wallet.

USER GUIDELINES:



ZINC AIR
is suitable for:



LONGER PERFORMANCE
Designed to provide longer lasting performance in appliances



NEW GENERATION
Excellent for the latest generation of Bluetooth hearing aids



VARIOUS TEMPERATURE CONDITIONS
The battery gives a reliable power in various temperature conditions to enjoy outdoor activities longer.



STEADY HIGH PERFORMANCE LEVEL
The energy stays the best at all time in this light weight battery.

DISPLAYS

Multiple locations in store

As battery purchases are mainly impulse driven, locating batteries at multiple locations in stores is very important: at the battery shelf, near the toy/electro shelf, in secondary placement via displays and at the checkout. Placing displays at multiple locations is the key to a successful battery business and can lead to a significant increase in sales.



DISPLAYS AT MULTIPLE LOCATIONS

- 1 standard battery shelf
- 2 displays near battery operated appliances (e.g. toys, electronics, DECT phones)
- 3 floor displays at gondola end
- 4 side hangers
- 5 magnetic displays (e.g. attached to baskets)
- 6 counter displays at checkout

COIN COUNTER DISPLAY

Carton promotional



BOOST YOUR SALES & MARGINS
with a dedicated
COIN COUNTER DISPLAY



COIN REFERENCE TABLE ON BACKSIDE!

- ✓ Growing category: +12% pieces sold in 2018 vs. 2017⁽¹⁾
- ✓ Child safety / anti-theft packaging
- ✓ Long shelf life (10 years)
- ✓ Reliable and long lasting power



4 in 1



STAND ALONE STACKABLE



ON TOP OF FLOOR DISPLAYS HANGING ON HOOKS

△ SHELF OPTIMIZER
5 REFERENCES ON 3 HOOKS⁽²⁾

3 VERSIONS AVAILABLE

36X CR2032/2B	12X CR2025/2B	12X CR2016/2B	12X CR2032/4B	12X CR2025/4B	12X CR2016/4B
12X CR2032/2B	12X CR2025/2B	12X CR2016/2B	12X LR44EL/2B	4X LRV08L/2B	

(1) 6IK 2018/12 EU6; 2018 vs 2017 in pieces of miniature cells.

(2) If coin 2B filling; 3 references if coin 4BP filling.

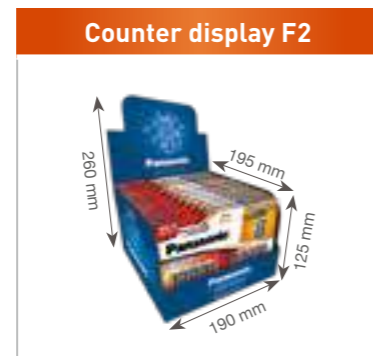
COUNTER DISPLAYS

Carton promotional



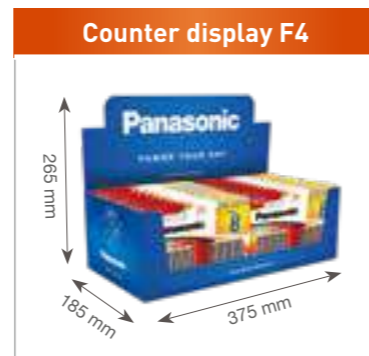
- Horizontal facing
- Pre-filled
- Suitable for different types of packaging
- Topcard with extra communication possible

Height excl. topcard	90 mm
Width	190 mm
Depth	390 mm
Topcard dimensions	H 185 x W 170 mm
Net weight ⁽¹⁾	0.155 kg
# product facings	N.A.
Max # AA/8BW	30
Possible with or without topcard	



- Vertical facing (shelf ready packaging)
- Pre-filled
- Stackable
- Flip-up topcard

Height incl. topcard	260 mm
Width	190 mm
Depth	195 mm
Topcard dimensions	H 135 x W 190 mm
Net weight ⁽¹⁾	0.110 kg
# product facings	1 (2 if 4BP)
Max # AA/8BW	12
Possible with or without topcard	



- Qualitative counter display
- Pre-filled
- Flip-up topcard
- Excellent product visibility & accessibility

Height incl. topcard	265 mm
Width	375 mm
Depth	185 mm
Topcard dimensions	H 141 x W 375 mm
Net weight ⁽¹⁾	0.147 kg
# product facings	2 (4 if 4BP)
Max # AA/8BW	24



- 4 IN 1 DISPLAY**
- Stand alone
 - Stackable
 - On top of a 15WSU floor display
 - Hanging on hooks

Height incl. topcard	185 mm
Width	275 mm
Depth	62 mm
Topcard dimensions	H 55 x W 273 mm
Net weight	0.107 kg
# product facings	5 (3 if 4BP)
Max # AA/8BW	60 (36 if 4BP)
# displays / pallet	288

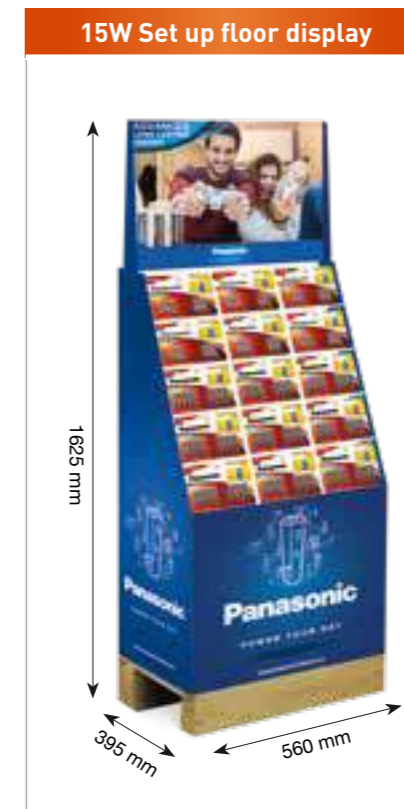
FLOOR DISPLAYS

Carton promotional



- Pop-up foot & flip-up topcard
- Pre-filled
- Easy to mount / fast setup
- Less waste (only carton materials)
- Display fits in a car

Height incl. topcard	1300 mm
Width	375 mm
Depth	435 mm
Topcard dimensions	H 340 x W 375 mm
Net weight ⁽¹⁾	3.25 kg
# product facings	12
# trays	2
# Max. AA/8BW	108
# displays/pallet	12



- Flip-up topcard
- Pre-filled & mounted, less handling
- Delivered on 1/4 pallet for safe and easy transportation
- Mono material carton display
- 100% ready to sell

Height incl. topcard & pallet	1625 mm
Width	560 mm
Depth	395 mm
Topcard dimensions	H 320 x W 560 mm
Net weight ⁽¹⁾	4.6 kg
# product facings	15
# trays	N.A.
# Max. AA/8BW	213
# displays/pallet	4



- Pre-filled & mounted
- Delivered on 1/4 pallet for safe and easy transportation
- Suitable for different types of packaging
- Mono material carton display

Height incl. topcard & pallet	1550 mm
Width	400 mm
Depth	600 mm
Topcard dimensions	H 400 x W 395 mm
Net weight ⁽¹⁾	2.7 kg
# product facings	N.A.
# trays	4 or 6
# Max. AA/8BW	from 196 to 294
# displays/pallet	4

(1) Displays weight is excluding display filling.

NOTE: Display types may vary from country to country. Please contact your local representative/dealer.

COUNTER DISPLAYS

Metal permanent



Height	655 mm
Width	220 mm
Depth	200 mm
Net weight ⁽¹⁾	2.5 kg
N° of hooks	6 fixed
Hook length	18 cm
Max. # AA/4BP per hook	12
Max. # AAA/4BP per hook	16
Max. # C/2BP per hook	8
Max. # D/2BP per hook	6
Max. # 9V/1BP per hook	11
For single blisters and wideblisters	



Height	655 mm
Width	220 mm
Depth	200 mm
Net weight ⁽¹⁾	2.5 kg
N° of hooks	6 fixed
Hook length	18 cm
Max. # AA/4BP per hook	12
Max. # AAA/4BP per hook	16
Max. # C/2BP per hook	8
Max. # D/2BP per hook	6
Max. # 9V/1BP per hook	11
For single blisters and wideblisters	



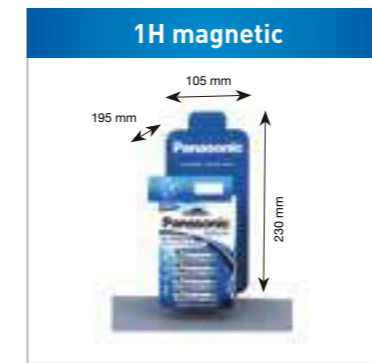
Height	660 mm
Width	315 mm
Depth	200 mm
Net weight ⁽¹⁾	3.4 kg
N° of hooks	9 fixed
Hook length	18 cm
Max # AA/4BP per hook	12
Max # AAA/4BP per hook	16
Max # C/2BP per hook	8
Max # D/2BP per hook	6
Max. # 9V/1BP per hook	11
For single blisters and wideblisters	



Height	805 mm
Width	315 mm
Depth	200 mm
Net weight ⁽¹⁾	3.7 kg
N° of hooks	12 fixed
Hook length	18 cm
Max # AA/4BP per hook	12
Max # AAA/4BP per hook	16
Max # C/2BP per hook	8
Max # D/2BP per hook	6
Max. # 9V/1BP per hook	11
For single blisters and wideblisters	



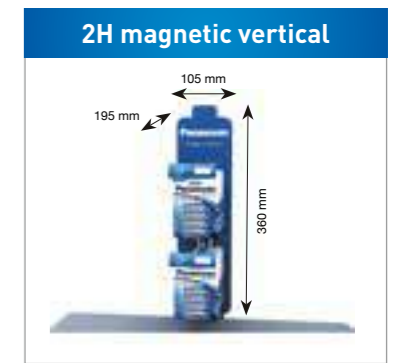
Height	660 mm
Width	220 mm
Depth	275 mm
Net weight ⁽¹⁾	3.192 kg
N° of hooks	10
Hook length	16.5 cm
Max. # AA/4BP per hook	12
Max. # AAA/4BP per hook	15
Max. # C/2BP per hook	6
Max. # D/2BP per hook	5
Max. # 9V/1BP per hook	9
Max. # coin/1B per hook	36
For single blisters and wideblisters	



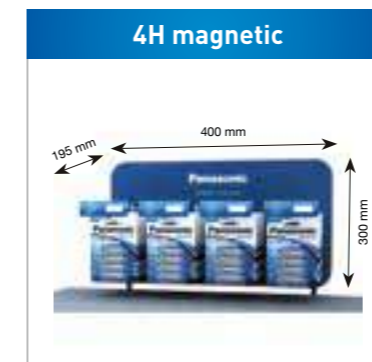
Height	230 mm
Width	105 mm
Depth	195 mm
Net weight ⁽¹⁾	0.382 kg
N° of hooks	1
Hook length	16.5 cm
Max # AA/4BP per hook	12
Max # AAA/4BP per hook	15
Max # C/2BP per hook	6
Max # D/2BP per hook	5
Max. # 9V/1BP per hook	9
For single blisters only	



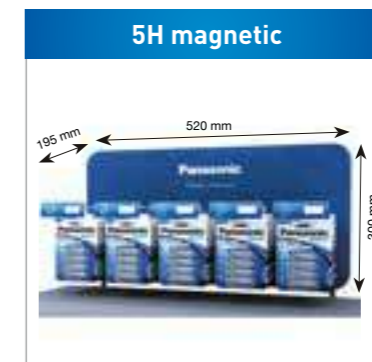
Height	210 mm
Width	200 mm
Depth	195 mm
Net weight ⁽¹⁾	0.926 kg
N° of hooks	2
Hook length	16.5 cm
Max # AA/4BP per hook	12
Max # AAA/4BP per hook	15
Max # C/2BP per hook	6
Max # D/2BP per hook	5
Max. # 9V/1BP per hook	9
For single blisters and wideblisters	



Height	360 mm
Width	105 mm
Depth	195 mm
Net weight ⁽¹⁾	0.708 kg
N° of hooks	2
Hook length	16.5 cm
Max # AA/4BP per hook	12
Max # AAA/4BP per hook	15
Max # C/2BP per hook	6
Max # D/2BP per hook	5
Max. # 9V/1BP per hook	9
For single blisters only	



Height	300 mm
Width	400 mm
Depth	195 mm
Net weight ⁽¹⁾	1.045 kg
N° of hooks	4
Hook length	16.5 cm
Max # AA/4BP per hook	12
Max # AAA/4BP per hook	15
Max # C/2BP per hook	6
Max # D/2BP per hook	5
Max. # 9V/1BP per hook	9
Max. # coin/1B per hook	36
For single blisters and wideblisters	



Height	300 mm
Width	520 mm
Depth	195 mm
Net weight ⁽¹⁾	1.594 kg
N° of hooks	5
Hook length	16.5 cm
Max # AA/4BP per hook	12
Max # AAA/4BP per hook	15
Max # C/2BP per hook	6
Max # D/2BP per hook	5
Max. # 9V/1BP per hook	9
Max. # coin/1B per hook	36
For single blisters and wideblisters	

(1) Displays weight is excluding display filling.

NOTE: Display types may vary from country to country. Please contact your local representative/dealer.

SIDEHANGERS

Metal permanent

5H premium magnetic strip



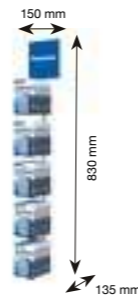
Height	758 mm
Width	102 mm
Depth	135 mm
Net weight ⁽¹⁾	1.4 kg
N° of hooks	5 fixed
Hook length	11.5 cm
Max # AA/4BP per hook	7
Max # AAA/4BP per hook	9
Max # C/2BP per hook	4
Max # D/2BP per hook	3
Max. # 9V/1BP per hook	6
For single blisters only	

5H premium strip



Height	758 mm
Width	102 mm
Depth	120 mm
Net weight ⁽¹⁾	1.2 kg
N° of hooks	5 fixed
Hook length	11.5 cm
Max # AA/4BP per hook	7
Max # AAA/4BP per hook	9
Max # C/2BP per hook	4
Max # D/2BP per hook	3
Max. # 9V/1BP per hook	6
For single blisters only	

5H strip



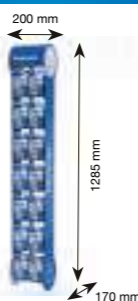
Height	830 mm
Width	150 mm
Depth	135 mm
Net weight ⁽¹⁾	0.8 kg
N° of hooks	5 fixed
Hook length	11.5 cm
Max # AA/4BP per hook	7
Max # AAA/4BP per hook	9
Max # C/2BP per hook	4
Max # D/2BP per hook	3
Max. # 9V/1BP per hook	6
For single blisters only	

8H magnetic sidehanger



Height	620 mm
Width	185 mm
Depth	230 mm
Net weight ⁽¹⁾	2 kg
N° of hooks	8 fixed
Hook length	20.5 cm
Max # AA/4BP per hook	13
Max # AAA/4BP per hook	17
Max # C/2BP per hook	8
Max # D/2BP per hook	6
Max. # 9V/1BP per hook	12
For single blisters and wideblisters	

14H premium magnetic strip



Height	1285 mm
Width	200 mm
Depth	170 mm
Net weight ⁽¹⁾	4.4 kg
N° of hooks	14 fixed
Hook length	16 cm
Max # AA/4BP per hook	9
Max # AAA/4BP per hook	12
Max # C/2BP per hook	6
Max # D/2BP per hook	5
Max. # 9V/1BP per hook	8
For single blisters and wideblisters	

FLOOR DISPLAYS

Metal permanent

28H floor display



Height	2030 mm
Width	495 mm
Depth	365 mm
Net weight ⁽¹⁾	25.5 kg
N° of hooks	28 fixed
Hook length	30 cm
Max # AA/4BP per hook	20
Max # AAA/4BP per hook	25
Max # C/2BP per hook	12
Max # D/2BP per hook	9
Max. # 9V/1BP per hook	16
For single blisters and wideblisters	

40H floor display



Height	2030 mm
Width	597 mm
Depth	365 mm
Net weight ⁽¹⁾	31 kg
N° of hooks	40 fixed
Hook length	30 cm
Max # AA/4BP per hook	20
Max # AAA/4BP per hook	25
Max # C/2BP per hook	12
Max # D/2BP per hook	9
Max. # 9V/1BP per hook	16
For single blisters and wideblisters	

(1) Displays weight is excluding display filling.

NOTE: Display types may vary from country to country. Please contact your local representative/dealer.

Online communication



www.panasonic-batteries.com

- Responsive design (desktop + tablet + smartphones)
- Monthly blog posts
- Frequently asked questions

www.facebook.com/Panasonic.Batteries.Europe

Follow us on Facebook to stay up to date about our products, our campaigns, fun facts and much more!



partner.panasonicenergy.eu

We have created a **PARTNER PORTAL** where you – our partners – can find everything you need to know about our products:

- product visuals
- sales folders
- technical data
- logos
- advertisements
- lifestyle visuals
- movies
- etc.

Ask your local sales contact for more info!

EVERYTHING IN 1 PLACE

EVOLTA

Model N°	Size	Technology	Voltage (V)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
LR03EGE	S	AAA	Alkaline	1.5	44.5	10.5	11.4
LR6EGE	M	AA	Alkaline	1.5	50.5	14.5	23.1
LR14EGE	L	C	Alkaline	1.5	50	25.7	68.7
LR20EGE	XL	D	Alkaline	1.5	61.5	33.6	140.9
6LR61EGE	9V	9V	Alkaline	9	47.5	25.25 x 16.3	43.3

Pro Power

Model N°	Size	Technology	Voltage (V)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
LR03PPG	S	AAA	Alkaline	1.5	44.5	10.5	11.4
LR6PPG	M	AA	Alkaline	1.5	50.5	14.5	23.1
LR14PPG	L	C	Alkaline	1.5	50	25.7	68.7
LR20PPG	XL	D	Alkaline	1.5	61.5	33.6	140.9
6LF22PPG	9V	9V	Alkaline	9	47.5	25.25 x 16.3	43.3
3LR12PPG	-	-	Alkaline	4.5	67	62 x 22	163

Everyday Power

Model N°	Size	Technology	Voltage (V)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
LR03EPS	S	AAA	Alkaline	1.5	44.5	10.5	10.8
LR6EPS	M	AA	Alkaline	1.5	50.5	14.5	23.1
LR14EPS	L	C	Alkaline	1.5	50	25.7	66.6
LR20EPS	XL	D	Alkaline	1.5	61.5	33.6	136.5
6LF22EPS	9V	9V	Alkaline	9	47.5	25.25 x 16.3	42.9

Alkaline Power

Model N°	Size	Technology	Voltage (V)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
LR03APB	S	AAA	Alkaline	1.5	44.5	10.5	10.8
LR6APB	M	AA	Alkaline	1.5	50.5	14.5	22.8
LR14APB	L	C	Alkaline	1.5	50	25.7	66.6
LR20APB	XL	D	Alkaline	1.5	61.5	33.6	136.5
6LF22APB	9V	9V	Alkaline	9	47.5	25.25 x 16.3	42.9

Red Zinc

Model N°	Size	Technology	Voltage (V)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
R03RZ	S	AAA	Zinc carbon	1.5	44	10.2	8.85
R6RZ	M	AA	Zinc carbon	1.5	50.25	13.9	17.5
R14RZ	L	C	Zinc carbon	1.5	49.4	25.4	47.7
R20RZ	XL	D	Zinc carbon	1.5	60.7	32.9	98.5
6F22RZ	9V	9V	Zinc carbon	9	48.5	17.5 x 26.5	37.9
3R12RZ	-	-	Zinc carbon	4.5	67	62 x 22	110
PP9RZ	-	-	Zinc carbon	9	78	65 x 50	368.76

Rechargeable Ready to Use 2450 - 900 mAh

Model N°	Size	Technology	Voltage (V)	Capacity (mAh) ⁽¹⁾	Height (mm)	Diameter (mm)	Weight (g)
HHR-4XXE	AAA	S	Ni-MH	900	43.9	10.2	12.6
HHR-3XXE	AA	M	Ni-MH	2450	50.35	14.2	29.2

Rechargeable Ready to Use 1900 - 750 mAh

Model N°	Size	Technology	Voltage (V)	Capacity (mAh) ⁽¹⁾	Height (mm)	Diameter (mm)	Weight (g)
HHR-4MVE	AAA	S	Ni-MH	750	44.5	10.5	13
HHR-3MVE	AA	M	Ni-MH	1900	50.5	14.5	29
HHR-2SRE	C	L	Ni-MH	2800	49.8	25.6	69.4
HHR-1SRE	D	XL	Ni-MH	2800	61.6	32.9	81.1

Rechargeable Ready to Use 1000 mAh & telephone

Model N°	Size	Technology	Voltage (V)	Capacity (mAh) ⁽¹⁾	Height (mm)	Diameter (mm)	Weight (g)
HHR-3LVE	AA	M	Ni-MH	1000	50.5	14.5	20.35

Coin Lithium

Model N°	Technology	Voltage (V)	Capacity (mAh)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
CR1025	Lithium	3	30	2.50	10.00	0.7	10
CR1216	Lithium	3	25	1.60	12.50	0.7	10
CR1220	Lithium	3	35	2.00	12.50	0.9	10
CR1616	Lithium	3	55	1.60	16.00	1.2	10
CR1620	Lithium	3	75	2.00	16.00	1.3	10
CR1632	Lithium	3	140	3.2	16.00	1.8	10
CR2012	Lithium	3	55	1.2	20.00	1.4	10
CR2016	Lithium	3	90	1.60	20.00	1.7	10
CR2025	Lithium	3	165	2.50	20.00	2.6	10
CR2032	Lithium	3	220	3.20	20.00	3.1	10
CR2354	Lithium	3	565	5.4	23.00	5.8	10
CR2430	Lithium	3	285	3.00	24.50	3.9	10
CR2450	Lithium	3	620	5.00	24.50	6.3	10

Cylindrical Lithium

Model N°	Technology	Voltage (V)	Capacity (mAh)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
CR2	Photo lithium	3	850	27	15.6	11.08	10
CR123	Photo lithium	3	1400	34.5	17.1	17	10
2CR5	Photo lithium	6	1400	45	17 x 34	38	10
CRP2	Photo lithium	6	1400	36	19.5 x 34	37	10

(1) Minimum capacity.

Micro Alkaline coin

Model N°	Technology	Voltage (V)	Capacity (mAh)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
LR41	Alkaline	1.5	44	3.60	4.90	0.60	3
LR44	Alkaline	1.5	120	5.10	11.50	1.95	3
LR1130	Alkaline	1.5	65	3.00	11.60	1.27	3
LRV08	Alkaline	12	52	28.50	10.30	7.92	3
LR1	Alkaline	1.5	900	30.20	12.00	9.20	5

Silver Oxide

Model N°	Technology	Voltage (V)	Capacity (mAh)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
SR521	Silver Oxide	1.55	17	2.15	5.80	0.24	3
SR616	Silver Oxide	1.55	16	1.65	6.80	0.25	3
SR621	Silver Oxide	1.55	23	2.15	6.80	0.31	3
SR626	Silver Oxide	1.55	28	2.60	6.80	0.39	3
SR721	Silver Oxide	1.55	25	2.10	7.90	0.41	3
SR920	Silver Oxide	1.55	45	2.05	9.50	0.60	3
SR927	Silver Oxide	1.55	55	2.70	9.50	0.80	3
SR936	Silver Oxide	1.55	70	3.60	9.50	1.07	3
SR1130	Silver Oxide	1.55	82	3.10	11.60	1.50	3
SR41	Silver Oxide	1.55	45	3.60	7.90	0.70	3
SR44	Silver Oxide	1.55	180	5.40	11.60	2.40	3
4SR44	Silver Oxide	6.20	160	25.10	13.00	11.00	3

Zinc Air

Model N°	Technology	Voltage (V)	Capacity (mAh)	Height (mm)	Diameter (mm)	Weight (g)	Shelf life (years)
PR10 (PR230/PR536)	Zinc air	1.4	100	3.6	5.8	0.30	3
PR13 (PR48)	Zinc air	1.4	300	5.4	7.9	0.83	3
PR312 (PR41)	Zinc air	1.4	170	3.6	7.9	0.58	3
PR675 (PR44)	Zinc air	1.4	650	5.4	11.6	1.85	3

Alkaline

PANASONIC	DURACELL	ENERGIZER	VARTA	KODAK	RAYOVAC	SONY	GP	OTHERS
LR03	MN/MX2400	E92	4X03	K3A	824	AM4	24A(UP)	AAA
LR6	MN/MX1500	E91	4X06	KA	815	AM3	15A(UP)	AA
LR14	MN/MX1400	E93	4X14	KC	814	AM2	14A(UP)	C
LR20	MN/MX1300	E95	4X20	KD	813	AM1	13A(UP)	D
6LR61/6LF22	MN/MX1604	522	4X22	K9V	A1604	AM6	1604A(UP)	9V
3LR12	MN/MX1203	3LR12PL	4X12	-	-	-	-	4.5V

Zinc Carbon

PANASONIC	ENERGIZER	VARTA	KODAK	GP	MAXELL	RAYOVAC	OTHERS
R03	A91/R03	R03/2003	K3A HZ/ZM	24PL/G	R03P(AB)	3AAA	AAA
R6	A92/R6	R6/2006	KA HZ/ZM	15PL/G	R6P	5Aw	AA
R14	A93/R14	R14/2014	KC HZ/ZM	14S/G	R14P	4C	C
R20	A95/R20	R20/2020	KD HZ/ZM	13S/G	R20P	6D	D
6F22	A522/6F22	6F22/2022	K9V VZM	1604 S/G	-	D1604	9V

Rechargeable

PANASONIC	DURACELL	ENERGIZER	VARTA	PHILIPS	MEMOREX	GP	OTHERS
HHR4 (P03)	HR03	HR03	5XXX3	NCR03P	HR03	AAHC(B)	AAA
HHR3 (P6)	HR6	HR6	5XXX6	NCR6P	HR6	AAHC(B)	AA
HHR2 (P14)	HR14	HR14	56714	NCR14P	HR14	CHC(B)	C
HHR1 (P20)	HR20	HR20	23720	NCR20P	HR20	DHC(B)	D
HHR9 (P22)	HR9V	HR22	56722	6NCR22P	9V	17R8H(B)	9V

Coin Lithium

PANASONIC	DURACELL	ENERGIZER	VARTA	KODAK	OTHERS
CR1025	1025	CR1025	-	-	-
CR1216	1216	CR1216	CR1216	-	-
CR1220	1220	CR1220	CR1220	-	-
CR1616	1616	CR1616	CR1616	-	-
CR1620	1620	CR1620	CR1620	-	-
CR1632	1632	CR1632	CR1632	-	-
CR2012	-	CR2012	-	KCR2012	-
CR2016	2016	CR2016	CR2016	KCR2016	LM2016
CR2025	2025	CR2025	CR2025	KCR2025	LM2025
CR2032	2032	CR2032	CR2032	KCR2032	LM2032
CR2354	-	-	-	KCR2354	-
CR2430	2430	CR2430	CR2430	KCR2430	LM2430
CR2450	2450	CR2450	CR2450	KCR2450	-

Cylindrical Lithium

PANASONIC	DURACELL	ENERGIZER	VARTA	KODAK	RAYOVAC	IEC
CR2	CR2	CR2	CR2	KCR1	CR2	CR17355
CR123	123	E123A	CR123	K123L	123A	CR17345
2CR5	245	2CR5	2CR5	KL2CR5	2CR5	2CR5
CRP2	223	223	CRP2	KCRP2A	223A	CRP2

Micro Alkaline

PANASONIC	DURACELL	ENERGIZER	VARTA	PHILIPS	KODAK	RAYOVAC	MAXELL	SONY	IEC
LR41	-	-	-	LR41	-	-	LR41	192/LR41	LR41
LR44	LR44	A76	V13GA	A76	KA76	A76	LR44	-	LR44
LR1130	LR54	189	V10GA	-	KA54	-	-	-	-
LRV08	MN21	A23	V23GA	8LR932	K23A	KE23A	-	-	8LR932
LR1	MN9100/N	E90	4001	LR1	KN	KE810/N	LR1	AM5	LR1

Silver Oxide

PANASONIC	DURACELL	ENERGIZER	VARTA	KODAK	MAXELL	RAYOVAC	RENATA	PHILIPS	IEC
SR516	317	317	V317	-	SR516SW	317	317	317	-
SR521	379	379	V379	-	SR521SW	379	379	379	SR63
SR616	321	321	V321	-	SR616SW	321	321	321	SR65
SR621	364	364/363	V364	-	SR621SW	364	364	364	SR60
SR626	377	377	V377	-	SR626SW	377	377	377	SR66
	376	376	-	-	SR626W	376	376	376	-
SR721	362	362	V362	-	SR721SW	362	362	362	SR58
	361	361	V361	-	SR721W	361	361	361	-
SR726	397/396	397/396	V397	-	SR726SW	397	397	397	SR59
SR920	371	371	V371	-	SR920SW	371	371	371	SR69
	370	370	V370	-	SR920W	370	370	370	-
SR927	395	395	V395	-	SR927SW	395	395	395	SR57
	399	399	V399	-	SR927W	399	399	399	-
SR936	394	394/380	V394	-	SR936SW	394	394	394	SR45
SR1120	391	391	V391	-	SR1120SW	391	391	391	SR55
	381	381	V381	-	SR1120W	381	381	381	-
SR1130	390	390	V390	-	SR1130SW	390	390	390	SR54
	389	389	V389	-	SR1130W	389	389	389	-
SR41	384	384	V384	-	SR41SW	384	384	384	SR41
	392	392	V392	-	SR41W	392	392	392	-
SR44	357/303	EPX76	V76PX/357/303	KS76	SR44	357	357	357	SR44
4SR44	PX28	544	V28PX	KS28	-	RPX28	RPX28	RPX28	4SR44

Zinc Air

PANASONIC	DURACELL	ENERGIZER	VARTA	MAXELL	RAYOVAC
PR10(230)	10	10	10	-	10
PR13	13	13	13	EP13E	13
PR312	312	312	312	EP312E	312
PR675	675	675	675	EP675E	675
PR675	-	EP675E	-	675AP	-

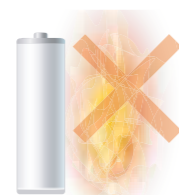
For all batteries

Use the same battery type/technology



When it's time to exchange batteries, be sure to replace all of them at the same time using the same battery type. Using different types (such as a mix of alkaline and zinc batteries, mix of different companies' batteries, or a mix of new and old batteries) may not only shorten service life, but could also result in battery leakage and explosion.

Avoid rough treatment



Try to handle your batteries with care. Avoid damaging the label, and don't expose them to excessive heat. Do not disassemble, modify, or solder the battery, and don't immerse the battery in liquid. Doing so may result in short-circuit, battery rupture, leakage, and possible injury.

Avoid installing batteries in the wrong direction



If batteries are installed improperly, they can become charged. This causes gas to build up, raising the internal pressure. This could lead to potentially dangerous overheating, leakage, rupture, and possibly result in personal injury.

Don't short-circuit your batteries



If batteries are accidentally shortcircuited, excessive current is generated instantaneously resulting in overheating and possible rupture. Avoid letting your batteries come into contact with metal objects such as necklaces, car keys, or paperclips.

What to do in case of leakage

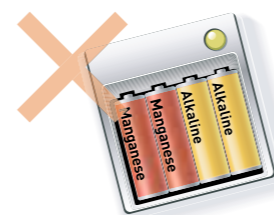


If a battery leaks due to accidental misuse, and electrolyte (battery fluid) comes into contact with your eyes, rinse them well with water and seek medical treatment immediately. If the electrolyte comes in contact with skin or clothing, rinse the exposed area thoroughly with water.



For Ni-MH rechargeable batteries

Never charge primary batteries



Charging primary batteries is highly dangerous and may result in injury. Recharge only Ni-MH batteries in an approved charging device. If Ni-MH batteries are charged with a device not specifically designed for that product, the battery may overheat, rupture, and leak.

Recharge Ni-MH batteries when fully depleted



It is best to recharge your Ni-MH batteries after they have been fully discharged. Doing so may provide longer usage and prolong the life of the product. When recharging is complete, it's also a good idea to remove the batteries from the charger as soon as possible. Remove the charger from the electrical outlet when batteries are replenished.

Replace all batteries at the same time

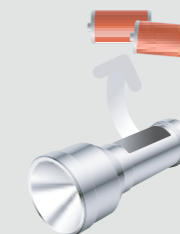


Mixing batteries at different states of depletion in your device can result in battery-fluid leakage and potential injury. When using rechargeable batteries, we recommend installing cells that were recharged at the same time.

Tips for enjoying better performance



Switch off your device after use



Remove batteries from devices not in use for long periods


























Carry a spare set of batteries



Tips for safe storage
10 °C to 25 °C
(50 °F to 77 °F)

Also check the Frequently Asked Questions section on our Panasonic website for more info:
www.panasonic-batteries.com/faq



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