

Primary Lithium Button and
Cylindrical Cells

Empowering a Smart and High-Quality Life



<https://www.varta-ag.com/de/industrie/produktloesungen/lithium>



VARTA

VARTA combines strategic visions and technological competence for premium products and application oriented designs. Whether single cell or assembled batteries – our product portfolio offers solutions for every application to empower a high-quality and more independent life.

Primary Lithium Cylindrical Cells



Key features and benefits

- Low self discharge (less than 1% per year at RT)
- Superior shelf life and operational life (up to 10 years and more – after 15 years of experience with laser welded sealing)
- High capacity or high-rate cell construction
- No passivation effect
- Operation over a wide temperature range
- 0 % lead, 0 % mercury and 0 % cadmium
- All cells are UL recognized
- Product support worldwide is available for design engineers
- Battery designs in various assemblies

Application Examples:

- **Alarm system**
Uninterrupted signal to guarantee maximum security.
- **Calorimeter**
For precise measuring of heat capacities or emissions.
- **Car alarm**
High reliability and availability are essential.
- **Gas consumption meter**
For smart metering to save limited resources.
- **Industry 4.0 sensor**
Best performance for analyzing data.



- **Home security station**
Best quality to protect your property.

- **Memory Back Up (MBU)**

For independent and continuously available data memory.

- **Toll collection system**

High flexibility and adaptability without ongoing disturbances.

- **Watch**

Long lifespans for the least amount of inconvenience.

- **Water consumption meter**

For smart metering to safe limited resources.



- **Smoke detector**

Protection for long after inspection is due.

Product Overview

Lithium Cylindrical Cells (Li-MnO₂) Hg0%

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)	DIAMETER (mm)	HEIGHT (mm)	WEIGHT (g)
CR mass/bobbin series						
CR 1/2 AA	6127	3.0	950	14.75	25.1	11.5
CR 2/3 AA	6237	3.0	1350	14.75	33.5	15.0
CR AA	6117	3.0	2000	14.75	50.5	21.5
CR coiled series						
CR 2	6206	3.0	850	15.60	27.0	11.0
CR 123 A	6205	3.0	1550	17.00	34.5	17.0
CR 1/2 AAH-R	6213	3.0	850	14.22	25.0	9.0
CR 2/3 AH-R	6214	3.0	1600	17.00	33.5	17.0
CR AH-R	6217	3.0	2400	17.00	45.0	23.0



Primary Lithium Button Cells



Key features and benefits

- Various PCB, SMT and wire & connector versions
- Low internal resistance for high pulse load
- High Capacity for longer running time
- Low self-discharge for long storage and operating time
- Wide temperature range (-20 °C up to 70 °C)
- UL Recognition
- Safe & reliable

Application Examples:



- **Smart Health**
For accurate health monitoring.

- **Alarm system**

Uninterrupted signal to guarantee maximum security.

- **Beacon**

Prolonged signal effect for more safety all-around.

- **Heart rate monitor**

For such portable devices a reliable running time is important.

- **Smart key**

Electronic access and authorization system.

- **Remote control**

Highest convenience by requiring almost no maintenance.

- **Industry 4.0 sensor**

Best performance for analyzing data.

- **Bicycle computer**

No need for numerous changes as an additional burden.

- **Blood sugar indicator**

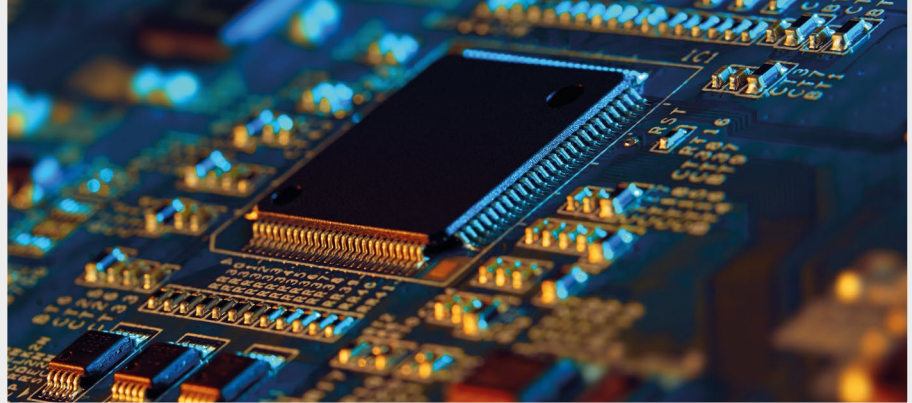
Very long lifecycles for many uses everywhere.

- **Data collection**

Best performance for gathering information.

- **Health monitoring**

For accurate results and a long running time.



- **Key light**

Long-lasting energy support for a strong light source.

- **Memory back-up (MBU)**

For independent and continuously available data memory.

- **Real time clock (RTC)**

Reliable back-up battery for mobile systems.

- **Timer system**

Strong signal without any interruptions.

- **Toll collection system**

High flexibility and adaptability without ongoing disturbances.

- **Tracking system**

Continuous signal for observations with timely order.

- **Watch (digital & analog)**

Long lifespans for the least amount of inconvenience.

- **Fitness tracker**

Best quality combined with best longevity.

Product Overview

Lithium Button Cells (Li-MnO₂)

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)	DIAMETER (mm)	HEIGHT (mm)	WEIGHT (g)
------------------	----------	-------------	----------------	---------------	-------------	------------

CR coin series

CR 1216	6216	3.0	27	12.5	1.6	0.7
CR 1220	6220	3.0	35	12.5	2.0	0.8
CR 1616	6616	3.0	55	16.0	1.6	1.2
CR 1620	6620	3.0	70	16.0	2.0	1.2
CR 2016	6016	3.0	90	20.0	1.6	1.8
CR 2016-P	6016	3.0	86	20.0	1.6	1.8
CR 2025	6025	3.0	165	20.0	2.5	2.5
CR 2025-P	6025	3.0	157	20.0	2.5	2.5
CR 2032	6032	3.0	230	20.0	3.2	3.0
CR 2032-P	6032	3.0	220	20.0	3.2	3.0
CR 2430	6430	3.0	300	24.5	3.0	4.0
CR 2430-P	6430	3.0	280	24.5	3.0	4.0
CR 2450	6450	3.0	620	24.5	5.0	6.2
CR 2450-P	6450	3.0	590	24.5	5.0	6.2
CR 1/3 N	6131	3.0	170	11.6	10.8	3.0



Primary Lithium Cylindrical

1.5V AA & AAA and 9V Block



Key features and benefits

- Longer running time and higher discharge voltage level (versus Primary Alkaline)
- Up to 38% reduced weight in comparison to Alkaline (higher gravimetric energy density versus Alkaline)
- Wide temperature range: -20 °C up to +60 °C (Li 1.5V AA versus Alkaline AA)
- Long shelf life (coding): 15/10 years
- Packaging for OEM customers

Application Examples:



- **Smart home device**
Best performance for a central regulation.

- **Smoke detector**

Protection for long after inspection is due.

- **GPS system**

High flexibility for precise tracking of locations.

- **Safety device**

Best energy and performance for more safety.

- **Digital camera**

Best quality for high-definition pictures.

- **Energy intensive application**

(long term and high energy demand)

High power for all kinds of energy intensive applications.



- **Sport and outdoor usage**

Strong signal for use over longer distances.

Product Overview

Lithium 1.5V AA & AAA and 9V Block

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)	DIAMETER (mm)	HEIGHT (mm)	LENGTH (mm)	WIDTH (mm)	WEIGHT (g)
FR AAA 1.5V	6103	1.5	1100	10.5	44.5			7.3
FR AA 1.5V	6106	1.5	2900	14.5	50.5			15.0
CR block 9V	6122	9.0	1150		17.5	49.0	26.5	41.0



Contacts

Headquarters

VARTA Microbattery GmbH
VARTA-Platz 1,
73479 Ellwangen, Germany
Tel +49 7961 921-0
Fax +49 7961 921-2553

Asia Pacific

VARTA Microbattery Pte. Ltd.
300 Tampines Avenue 5,
#05-01 Income
@ Tampines Junction,
529653 Singapore
Tel +65 6 260 58 01
Fax +65 6 260 59 60

Japan

VARTA Microbattery Japan K.K.
Kyobashi Y'SUS Bldg,
3F.1-6-12, Kyobashi, Chuo-Ku
Tokyo 104-0031, Japan
Tel +81 3 35 67 81 71
Fax +81 3 35 67 81 75

China

VARTA Competence Center Shenzhen
EMEA Consumer Batteries (Shenzhen) Co. Ltd.
No. 1003 Forsafe Technology Building B,
13 GaoXinSouth 1st Rd. Hi-tech Industrial Park,
Nanshan District, Shenzhen City, China
Tel: +86 755 3397 4791

Taiwan

VARTA Microbattery Pte. Ltd.
3F No.85, Xihu 1st Road,
Neihu District Taipei City 114, Taiwan
Tel +886 2 27 90 29 92

Hong Kong

VARTA Microbattery Pte. Ltd.
Room 1702-3, 17/F Fullerton Centre
19 Hung to Road, Kwun Tong
Kowloon, Hongkong
Tel +852 28 98 83 73
Fax +852 28 97 76 09

USA

VARTA Microbattery Inc.
555 Theodore Fremd Avenue,
Suite C 304 Rye, NY 10580, USA
Tel +1 914 592 25 00
Fax +1 914 345 04 88

Representations and distributors in all major countries worldwide.
Please see webpage.



www.youtube.com/VARTAMicrobatteryGmbH



www.linkedin.com/showcase/varta-microbatteries



www.youtube.com/VARTAMicrobatteryGmbH

VARTA Microbattery GmbH is a company of VARTA AG.

www.varta-ag.com