

Rechargeable Nickel-Metal Hydride
Button Cells

Empowering Independence for a Smart and High-Quality Life

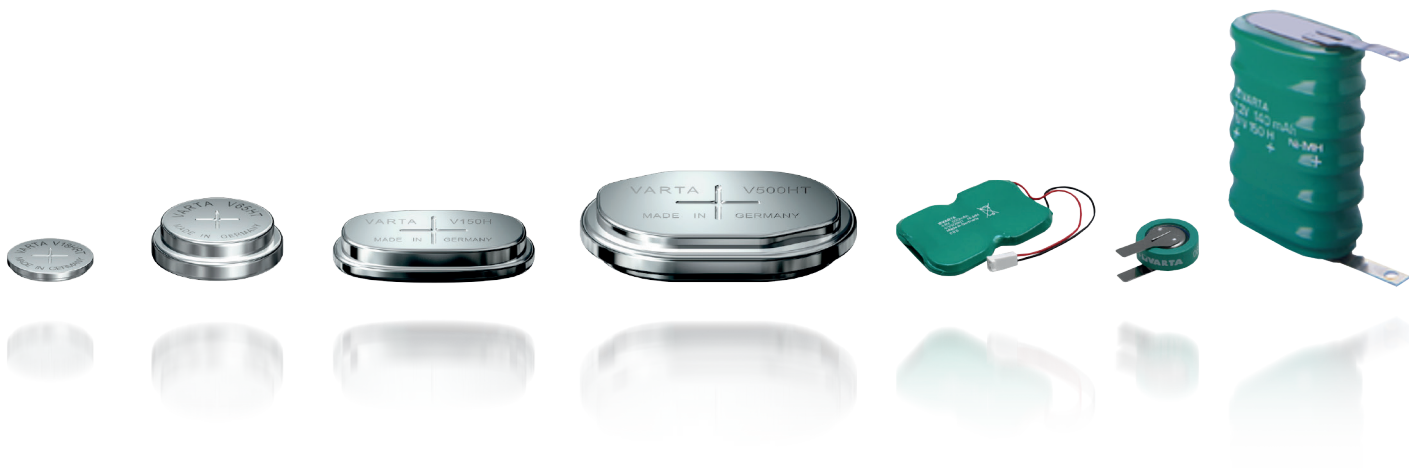


<https://www.varta-ag.com/en/industry/product-solutions/nickel-metal-hydrides>



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.



Quality – Made in Germany

- High capacities
- No memory effect
- Long life expectancy
- Excellent charge & discharge characteristics
- 0 % lead, 0 % mercury and 0 % cadmium
- Safe & reliable (UL recognition)
- Proven & robust technology
- Usable also in extended temperature environments

Battery Guide

Four button cell families with specific strengths and features provide the ideal battery solution for any application.

	V...H robust	V...HT robust85C	V...HR powerful	V...HR powerful85C
self discharge	++	++	+	+
overcharge	++	+++	+	+
deep discharge	++	++	+	+
cycle life	+++	+++	+++	+++
storage behaviour	++	++	+	+
high rate capacity	+	+	+++	++
charge efficiency at high temp.	+	++	+	++
temperature range	+	++	+	++

Key features and benefits

- Robust & Reliable main and backup power over years
- No safety, transportation or raw material restrictions (versus Li systems)
- Higher energy and longer run times at Memory Back Up (MBU)/ Real Time Clock (RTC) and Data Transmission applications versus supercap/EDLC solutions
- Flexible voltage configurations
- Design, flexibility and wide type range = configuration range for your application requirements
- Easy to handle
- Low space, slim application design's supported
- UL Recognition
- Shortage and tremendous price increase of Lithium forecasted for the future
- Especially for industrial, high and low temperature, MBU und RTC application

V...H robust

High performance button cell with superior overcharge stability and discharge currents ≤ 2 CA. Based on mass electrode technology, temperature range -20°C to +65°C.

Typical Applications:

- Memory Backup
- Real Time Clock
- Mobile Light

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)
V 15 H	55602	1.2	16
V 40 H	55604	1.2	43
V 80 H	55608	1.2	80
V 150 H	55615	1.2	150
V 200 H	55620	1.2	210
V 250 H	55625	1.2	250
CP 300 H	55630	1.2	300

V...HT robust85C

High performance button cell with superior overcharge stability and discharge currents ≤ 2 CA at high temperature. Based on mass electrode technology, temperature range -20°C to +85°C.

Typical Applications:

- Industrial Electronics
- Automotive Applications

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)
V 65 HT	55707	1.2	70
V 150 HT	55716	1.2	150

V...HR powerful

High rate button cell with superior load capability for discharge currents up to 5 CA. Based on foam electrode technology, temperature range -20°C to +65°C.

Typical Applications:

- Consumer Electronics
- Health Care Devices
- Wireless IoT Devices

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)
V 6 HR	55996	1.2	6.2
V 450 HR	55945	1.2	450
V 600 HR	55960	1.2	600

V...HRT powerful85C

High rate and high temperature button cell with superior load capability for discharge currents up to 5 CA at high temperature. Based on foam electrode technology, temperature range -20°C to +85°C. Server, Computer

- Emergency Light, Solar Light

Typical Applications:

- Back-up for e-Call
- Tracking Systems

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)
V 18 HRT	55802	1.2	19
V 150 PT	55815	1.2	150
V 500 HT	55750	1.2	510
V 550 HRA	55855	1.2	550
V 600 HRT	55860	1.2	600

Application Examples:



- **GPRS modem for energy meter data acquisition**

The battery is a main power backup in case of power failure.

- **Electricity meter**

For smart metering to save limited resources.

- **Emergency light**

Best energy source for reliable performance.

- **Tracking**

Continuous signal for observations with timely order.

- **Energy harvesting**

Best energy storage by irregular input.

- **GPS terminal**

High flexibility for precise tracking of locations.

- **Laptop**

High data reliability in case of unexpected power down.

- **LED lighting system**

Long-lasting energy support for a strong light source.

- **Memory Back Up (MBU)**

For independent and continuously available data memory.

- **Alarm system**

Uninterrupted signal to guarantee maximum security.





- **e-call and vehicle tracking**
Best support for all kind of emergencies.

- **Rechargeable flashlight**
High performance even after numerous times of charging.

- **Sensor network**
High flexibility and adaptability without ongoing disturbances.

- **Smart key**
Electronic access and authorization system.
- **Timer**
Strong signal without any interruptions.

- **Container tracking**
Strong signal for reliable container tracking.



Product Overview

Rechargeable Button Cells (NiMH)

TYPE DESIGNATION	TYPE NO.	VOLTAGE (V)	CAPACITY (mAh)	DIAMETER (mm)	HEIGHT (mm)	LENGTH (mm)	WIDTH (mm)	WEIGHT (g)
V...H robust								
V 15 H	55602	1.2	16	11.5	3.10			1.30
V 40 H	55604	1.2	43	11.5	5.35			1.70
V 80 H	55608	1.2	80	15.5	6.00			4.00
V 150 H	55615	1.2	150		5.85	14.1	25.6	6.00
V 200 H	55620	1.2	210		7.40	14.1	25.6	7.00
V 250 H	55625	1.2	250	25.1	6.70			10.00
CP 300 H	55630	1.2	300	25.1	7.55			11.00
V...HT robust85C								
V 65 HT	55707	1.2	70	15.5	6.00			4.00
V 150 HT	55716	1.2	150		5.85	14.1	25.6	6.00
V...HR powerful								
V 6 HR	55996	1.2	6.2	6.8	2.15			0.28
V 450 HR	55945	1.2	450		5.60	24.1	34.1	12.50
V 600 HR	55960	1.2	600		6.80	24.1	34.1	14.50
V...HRT powerful85C								
V 18 HRT	55802	1.2	19	11.5	2.30			0.90
V 150 PT	55815	1.2	150		3.60	24.1	34.1	7.50
V 500 HT	55750	1.2	510		6.60	24.2	34.1	14.00
V 550 HRA	55855	1.2	550		6.80	24.1	34.1	14.50
V 600 HRT	55860	1.2	600		6.80	24.1	34.1	14.50

Not all product types are available at the time of printing.
Voltage and Capacity indicated refer to nominal and typical values respectively.

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

Mainland 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

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

Taiwan Region

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

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

Hong Kong SAR of China

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

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



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