



# **Product Overview**

# RECHARGEABLE MICROBATTERIES

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#### Rechargeable NiMH Battery Range

#### Rechargeable Button Cells (NiMH)

VH robust								
V 15 H	55602	1.2	16	11.5	3.10			1.30
V 30 H	55603	1.2	28	11.5	3.85			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 350 H	55635	1.2	380	25.1	8.80			13.00
VHT 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
VHR powerful								
V 6 HR	55996	1.2	6.2	6.8	2.15			0.28
RTC 6	55997	1.2	7	6.8	2.15			0.28
MBU 20	55803	1.2	22	11.5	2.30			0.90
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
VHRT powerful85C								
V 18 HRT	55802	1.2	19	11.5	2.30			0.90
V 160 HRT	55816	1.2	150		3.20	24.1	34.1	9.0
V 500 H(R)T	55750	1.2	510		6.60	24.2	34.1	14.00
V 650 HRT*	55865	1.2	650		6.80	24.2	34.1	15.00

Not all product types are available at the time of printing.

Voltage and Capacity indicated refer to nominal and typical values respectively

#### Rechargeable Cylindrical Cells (NiMH)

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VH 700 AAA	55171	1.2	730	10.5	43.7		13.0
VH 1300 AA	55115	1.2	1340	14.4	48.2		25.0
VH 1600 AA	55119	1.2	1640	14.5	49.2		26.0
VH 1800 AA	55123	1.2	1850	14.5	49.2		27.0
VH 2100 4/5A	55118	1.2	2150	17.0	43.0		35.0
VH 2700 A	55127	1.2	2700	16.7	48.8		40.0
VH 4000 4/3A	55140	1.2	4000	17.0	67.5		55.0
VH 4500 4/3 FA	55145	1.2	4500	18.0	67.5		58.0

#### 9V Battery (NiMH)

,							
V 7/8 H R4U	05122	8.4	180	15.7	48.5	26.6	48.0
V 6/8 H PLUS	05422	7.2	150	15.7	48.5	26.6	41.0
V 7/8 H ECO	05522	8.4	150	15.7	48.5	26.6	47.0
V 7/8 H ULTRA	05622	8.4	150	15.7	48.5	26.6	47.0

Type Designation Type No. Type No. (V) (MAh) Diameter (mm) Length (mm) Width
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#### Rechargeable Lithium Battery Range

#### Rechargeable Button Cells (Li-Ion)

Button Cells (Li-lon) CoinPower										
CP 1254	63125	3.7	50	12.1	5.40			1.6		
CP 1654	63165	3.7	100	16.1	5.40			3.2		

#### CellPac LITE Product Range\*\*

Rechargeable Lithium-Polymer and Lithium-Ion/Standard Battery Packs

EasyPack Range, 3.7V							
EasyPack S	56445 701 099	595		6.0	43.7	35.6	14.0
EasyPack L	56446 701 099	1130		6.6	64.7	36.8	28.0
EasyPack XL	56446 702 099	2260		11.6	64.7	36.8	48.0
Li-Polymer/Li-Ion Pouch-Ty	/pes, 3.7V						
1/ LPP 523450 DL W	56493 201 012	1000		5.6	51.5	34.5	18.0
1/ LPP 503759 DL W	56478 201 012	1300		5.4	60.5	37.5	24.0
1/ LPP 422339 PL W	56477 201 013	380		4.2	41.0	24.0	10.0
1/ LPP 443441 PN W	56445 201 012	595		4.6	41.9	33.8	13.0
1/ LPP 423566 BE NTC W	56437 201 012	1160		4.6	66.9	35.5	26.0
2P/ LPP 503562 DL WC	56422 302 016	2600		10.6	64.5	35.5	43.0
1/ LPP 503562 DL WC	56422 201 013	1300		5.5	63.5	35.5	22.0
1/ LPP 503562 DL W	56422 201 012	1300		5.6	63.5	35.5	22.0
1/ LPP 402934 E W	56417 201 015	310		4.3	35.5	29.5	9.0
1/ LPP 402025 CE W	56416 201 020	150		4.4	26.5	20.5	3.8
Li-Polymer/Li-Ion Can Type	es, 3.7 V						
1/ LIP 423048 AJL NTC W	56476 201 012	720		6.0	52.0	31.0	25.0
1/ LIP 523450 AJL W	56425 201 012	1100		6.0	54.5	35.0	25.0
1/ LIP 423450 AJL W	56424 201 012	880		6.0	52.0	31.0	25.0
Li-lon Round-Types, 3.7V							
1/ LIC 18650-22 AL W	56636 201 012	2200	19.0	71.0			50.0

#### CellPac PLUS Service

CellPac Plus is a new custom battery design service by VARTA Microbattery. CellPac PLUS combines VARTA's cell and electronics knowledge and experience of designing batteries for electronic applications for industrial, medical and communications markets.

CellPac PLUS, offers a total project management, end to end battery design solution from the initial specification to product manufacture.

The design and development process includes

- Mechanical design
- Chemical architecture
- Electrical and electronic design
- Embedded vs. removable battery
- Certification and testing

For further information, please visit www.cellpacplus.com





## PRIMARY MICROBATTERIES

Designation
Type No.
Type No.
Voltage
(V)
Diameter
(mm)
Diameter
(mm)
Width
(mm)
(mm)
(mm)

#### Silver Oxide Button Cells (Ag<sub>2</sub>O)

Silver Oxide But	ton Cells	$(Ag_2O)$				Hg <b>U</b> %)
Mercury-free						
V 301 MF	20301	1.55	86	11.6	4.20	1.78
V 303 MF	20303	1.55	160	11.6	5.40	2.33
V 309 MF	20309	1.55	70	7.9	5.40	1.08
V 315 MF	20315	1.55	19	7.9	1.65	0.40
V 317 MF	20317	1.55	10.5	5.8	1.60	0.18
V 319 MF	20319	1.55	21	5.8	2.66	0.28
V 321 MF	20321	1.55	14.5	6.8	1.65	0.25
V 329 MF	20329	1.55	37	7.9	3.10	0.60
V 335 MF	20335	1.55	6	5.8	1.25	0.15
V 337 MF	20337	1.55	8.3	4.8	1.65	0.13
V 339 MF	20339	1.55	11	6.8	1.40	0.22
V 341 MF	20341	1.55	15	7.9	1.45	0.28
V 344 MF	20344	1.55	100	11.6	3.60	1.49
V 346 MF	20346	1.55	9	7.9	1.29	0.30
V 350 MF	20350	1.55	105	11.6	3.60	1.49
V 357 MF	20357	1.55	145	11.6	5.40	2.33
V 361 MF	20361	1.55	20	7.9	2.10	0.40
V 362 MF	20362	1.55	21	7.9	2.10	0.40
V 364 MF	20364	1.55	17	6.8	2.15	0.33
V 370 MF	20370	1.55	34	9.5	2.10	0.60
V 371 MF	20371	1.55	35	9.5	2.10	0.61
V 373 MF	20373	1.55	30	9.5	1.60	1.50
V 377 MF	20377	1.55	24	6.8	2.60	0.39
V 379 MF	20379	1.55	16	5.8	2.15	0.23
V 381 MF	20381	1.55	45	11.6	2.10	0.90
V 384 MF	20384	1.55	40	7.9	3.60	0.69
V 386 MF	20386	1.55	115	11.6	4.20	1.78
V 389 MF	20389	1.55	60	11.6	3.05	1.31
V 390 MF	20390	1.55	60	11.6	3.05	1.32
V 391 MF	20391	1.55	42	11.6	2.10	0.90
V 392 MF	20392	1.55	40	7.9	3.60	0.69
V 393 MF	20393	1.55	75	7.9	5.40	1.08
V 394 MF	20394	1.55	56	9.5	3.60	1.04
V 395 MF	20395	1.55	42	9.5	2.70	0.75
V 396 MF	20396	1.55	27	7.9	2.60	0.55
V 397 MF	20397	1.55	23	7.9	2.60	0.50
V 399 MF	20399	1.55	42	9.5	2.70	0.75

#### Nickel Zinc Button Cells (NiOOH)

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Mercury-free							
V 357 ZR	22357	1.65	130	11.6	5.40		2.33
V 364 ZR	22364	1.65	12	6.8	2.15		0.33
V 371 ZR	22371	1.65	23	9.5	2.10		0.61
V 377 ZR	22377	1.65	16	6.8	2.60		0.39
V 379 ZR	22379	1.65	8	5.8	2.15		0.23
V 392 ZR	22392	1.65	33	7.9	3.60		0.69

#### Mercury-free and environment

Since 2010 VARTA Microbattery provides the whole silver oxide button cell assortment mercury-free. This is a further milestone in the development of high performance, reliable and environment-friendly batteries.

VARTA Microbattery's Nickel Zinc assortment is mercury-free just like the silver oxide assortment.

# Type No. Type No. Type No. Voltage (V) Diameter (mm) Height (mm) Width (mm) Weight (m)

#### Lithium Cylindrical Cells (Li-MnO<sub>2</sub>)

	(		21							
CR mass/bobbin serie	s									
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 coiled series									
CR 2/3 AH	6215	3.0	1500	17.0	33.5			17.0		
CR 123 A	6205	3.0	1550	17.0	34.5			17.0		
CR 2	6206	3.0	850	15.6	27.0			11.0		

#### Lithium Cylindrical Cells (Li-SOCI<sub>2</sub>)

ER bobbin series							
ER 1/2 AA	7126	3.6	1200	14.6	25.1		8.8
ER AA	7106	3.6	2500	14.6	50.5		16.0
ER A	7110	3.6	3650	16.8	50.5		25.9
ER C	7114	3.6	8500	25.9	50.0		51.0
ER D	7120	3.6	19000	33.8	59.7		100.0

#### Lithium Button Cells (Li-MnO<sub>2</sub>)

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 2025	6025	3.0	165	20.0	2.5		2.5
CR 2032	6032	3.0	230	20.0	3.2		3.0
CR 2430	6430	3.0	280	24.5	3.0		4.0
CR 2450	6450	3.0	560	24.5	5.0		6.2
CR 1/3 N	6131	3.0	170	11.6	10.8		3.0

#### Alkaline Manganese Button Cells (Zn-MnO<sub>2</sub>)

•				2'			
V 10 GA	4274	1.5	50	11.6	3.05		1.1
V 12 GA	4278	1.5	70	11.6	4.2		1.35
V 13 GA	4276	1.5	125	11.6	5.4		1.8
P 23 GA	4223	12.0	50	10.3	28.5		7.9
V 625 U	4626	1.5	200	16.0	6.2		3.3

#### Powerone)) Alkaline Cylindrical Cells

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LR 3								
Micro/AAA/AM 4	4103	1.5	1200	10.5	44.5			11
LR 6								
Mignon/AA/AM 3	4106	1.5	2600	14.5	50.5			23
LR 14								
Baby/C/AM 2	4114	1.5	7800	26.0	50.0			69
LR 20								
Mono/D/AM 1	4120	1.5	16500	34.0	61.0			141
6 LR 61								
E-Block/6 AM 6	4122	9.0	550		17.5	48.5	26.5	46

### Hydrogen Gas Generating Cells ( $H_2$ Cells)\*

V 130 H	4690	130 ml	11 55	5.45	

V 130 H<sub>2</sub> | 4690 | 130 ml | 11.55 | 5.45 | | 1.8

<sup>\*</sup> Portable energy independent H<sub>2</sub> gas generating cells. For more details see: http://www.varta-microbattery.com/top/h2

#### Product Portfolio

Primary Batter	ies							
0	Lithium-Manganese Cells Lithium-Thionyl-Chloride Cells	8	Zinc Air Cells		Alkaline Batteries			
0	Lithium Button Cells	C	Silver Oxide Button Cells	9	Nickel Zinc Button Cells			
Rechargeable Batteries								
	Li-Ion Button Cells CoinPower	3	NiMH Button Cells (VH / HR / HT / HRT)		NiMH Cylindrical			
A	Li-lon & Li-Polymer Batteries Cylindrical & Prismatic & CellPac LITE	-	Li-Power Packs CellPac PLUS		Li-Power Packs CellPac BIKE			
Hydrogen Gas	Generating Cells		'		'			
	VARTA H <sub>2</sub> Cells							

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