



VARTA batteries shape the future of IoT

Application areas of VARTA batteries in IoT connected devices and systems

- Smart City / Smart Home / Smart Metering
- Wearables
- IT / Communications
- Industrial / Robotics
- Consumer
- Medical
- Automotive
- · Security

Our batteries support the communication of the following network standards

- Sigfox
- LTE
- NB loTLPWAN
- Wireless Mbus

Expert service

- Optimal battery selection
- · Battery design-in support
- Advanced battery specification
- · Application tests
- Qualification / approvals

Your benefits

- Premium energy
- High-level safe products
- UL recognition
- Top performance with wide temperature range
- Superior shelf life and operational life
- · High energy density
- Low self discharge
- · Resistance to corrosive environments
- · Patented mass production know-how
- Standard and customized solutions
- Wide range of application knowledge

Concentrated energy for many kinds of loT devices

The Internet of Things can make life easier and reinvent the way people interact with the physical world. With batteries from VARTA all requirements for devices and systems are created to network and interact in IoT. We provide several battery technologies for IoT connection of a device.

Product overview of batteries for IoT applications

Rechargeable batteries

Lithium-Ion Button Cells (Li-Ion) CoinPower

Element for Botton Cotto (El Ton) Com Civil										
		VOLTAGE	CAPACITY	DIAMETER	HEIGHT	LENGTH	WIDTH	WEIGHT		
TYPE DESIGNATION	TYPE N^O.	(V)	(mAh)	(mm)	(mm)	(mm)	(mm)	(g)		
A-Version										
CP1654 A4	63165	3.7	155	16.1	5.4			3.2		
CP1454 A4	63145	3.7	114	14.1	5.4			2.4		
CP1254 A4	63125	3.7	77	12.1	5.4			1.6		
CP1250 A4	63121	3.7	62	12.1	5.0			1.6		
CP1240 A4	63124	3.7	55	12.1	4.0			1.2		
CP9454 A4	63095	3.7	41	9.4	5.4			1.0		
C-Version C-Version										
CP1254 C1	65125	3.85	78	12.1	5.4			1.8		
CP1054 C1	65125	3.85	50	10.1	5.4			1.2		
CP7854 C1	65075	3.85	28	7.8	5.4			0.7		

Further types on request

Nickel-Metal Hydride Button Cells (NiMH)

TYPE DESIGNATION T	YPE NO.	VOLTAGE (V)	CAPACITY (mAh)	DIAMETER (mm)	HEIGHT (mm)	LENGTH (mm)	WIDTH (mm)	WEIGHT (g)		
VHT robust85C	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		
VHRT powerful85C										
V 18 HRT	55802	1.2	19	11.5	2.30			0.90		
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

9V Battery (NiMH)

V 7 / 8 H ECO	05522	8.4	150	15.7	48.5	26.6	47.0

Primary batteries

Lithium Cylindrical Cells (Li-MnO₂)

Elimoni oyunarioat ootto (El Tino ₂)									
		VOLTAGE	CAPACITY	DIAMETER	HEIGHT	LENGTH	WIDTH	WEIGHT	
TYPE DESIGNATION	TYPE NO.	(V)	(mAh)	(mm)	(mm)	(mm)	(mm)	(g)	
CR mass/bobbin series									
CR 1/2 AA	6127	3.0	950	14.75	25.1			11.5	
CP 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 2/3 AH	6215	3.0	1500	17.00	33.5			17.0	
CR 123 A	6205	3.0	1550	17.00	34.5			17.0	
CR 2	6206	3.0	850	15.60	27.0			11.0	
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	
CR 1/2 AAH-R	6213	3.0	850	14.22	25.0			9.0	

Lithium Button Cells (Li-MnO₂)

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	6220	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	6217	3.0	300	24.5	3.0	4.0
CR 2450	6450	3.0	620	24.5	5.0	6.2
CR 1/3 N	6131	3.0	170	11.6	10.8	3.0

VARTA Industrial Pro Alkaline Cylindrical Cells

Micro/AAA/AM 4 04003	1.5	1270 10.	5 44.5			11
LR 6 Mignon/AA/AM 3 04006	1.5	2970 14.	5 50.5			23
LR 14 Baby/C/AM 2 04014	1.5	7800 26.	0 50.0			69
LR 20 Mono/D/AM 1 04020	1.5	17000 34	0 61.0			141
6 LR 61 E-Block/6 AM 6 04022	9.0	640	17.5	48.5	26.5	46

Empowered by VARTA



WIRELESS SENSORS

They are designed to make our everyday lives easier and more convenient by connecting several components with each other, thus ensuring an intelligent exchange of data between the devices.

Example of use:

Smart buildings, facility management, smart workplaces, smart manufacturing, warehousing etc.



Window Sensors

Window sensors monitor exactly which windows (and/or doors) are opened and closed and can give immediate notification to any device wanted.

Application fields:

Security, smart homes etc.

Source: Disruptive Technologies

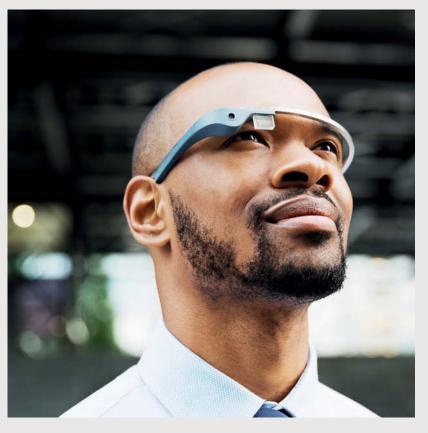


Security Systems

Security systems protect us by either securing entry points like doors and windows, tracking our valuables or detecting environmental danger.

Application examples:

Smoke alarm devices, wireless alarm systems, motion detectors, security systems for cash transport and installations, electronic bracelets etc.



SMART GLASSES

Smart glasses and virtual reality systems communicate unobtrusively with the user and allow new approaches e.g. in the areas of gaming, entertainment, industrial and even medical.

Example of use:

Product design, repair and maintenance, entertainment, chirurgical operations etc.



Smart Watches

The extension of our smartphones: A digital watch that communicates directly with the phone, has a touchscreen display and also several apps included.



Digital Price Tags

Mostly used by retailers and industry, digital price tags are a self-updating, environment scanning and interactive technology to create an overall better information and customer experience.



Smart Keys

The next generation of smart key fobs communicates with other systems and provides advanced functionalities.

Contacts

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



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