



Batteries for Metering Applications

Applications: gateways, heat cost allocators, electricity, gas and water meters.

To ensure trouble-free data security, utility meters need a reliable power source. The battery must function reliably even under widely fluctuating ambient temperatures and must also be designed for a long service life to reduce maintenance costs. In the case of automated meter reading, the battery must also be able to deliver high pulse currents even after long periods.

Panasonic is one of the world's largest battery manufacturers with more than 90 years of experience in the production of high-quality industrial batteries.

Our Lithium batteries are ideal for long-term use in applications with different temperature requirements. Due to Panasonic's unique CR technology, which is not affected by passivation, the battery voltage is retained over a period of many years. With a life of more than 15 years, our batteries therefore always deliver reliable power even after long storage.

FEATURES OF OUR LITHIUM BATTERIES:



No passivation



Low self-discharge



Stable internal resistance



Wide temperature range



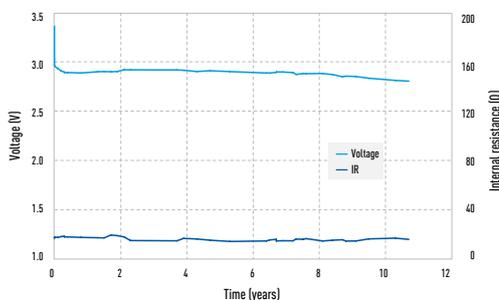
No capacitor required



LITHIUM COIN TYPE BATTERIES BR-A SERIES



DISCHARGING CHARACTERISTICS BR-2477A



FEATURES

- Ideal for high temperature applications
- Wide temperature range (-40 to 125°C)
- Low self-discharge (<0.5% per year at 20°C)

Test condition
Discharge: 300kΩ at 20°C

APPLICATIONS

for details please see below table



Electricity meter



Water meter

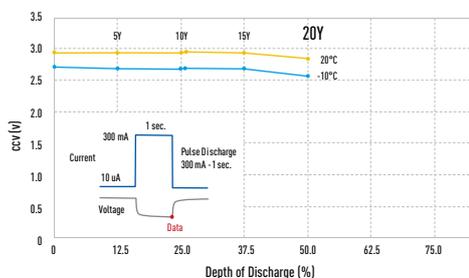


Heat cost allocator

LITHIUM CYLINDRICAL TYPE BATTERIES CR SERIES



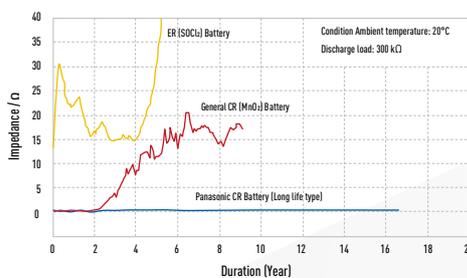
SUPERIOR PULSE DISCHARGE STABILITY



FEATURES

- Stable internal resistance
- Excellent pulse discharging characteristics
- Wide temperature range (-40 to 85°C)
- Low self-discharge (<1% per year at 20°C)

STABLE INTERNAL RESISTANCE BEHAVIOR WITHOUT PASSIVATION



APPLICATIONS

for details please see below table



Gas meter



Water meter



Gateway

SELECTION OF SUITABLE BATTERIES

Model number	Size	Nominal voltage (V)	Nominal capacity (mAh)	Diameter (mm)	Total height (mm)	Weight (g)	Operating temperature (°C)	Applications					
								Electricity meter	Gas meter	Water meter	Heat cost allocator	Gateway	
BR-2477A	...	3	1,000	24.5	7.7	8.0	-40 to +125	●		●	●		
CR-2Z	15270	3	1,000	15.6	27.0	11.0	-40 to +85*			●			
CR-2/3AZ	2/3A 17335	3	1,600	17.0	33.5	16.0	-40 to +85*		●	●			
CR-AAU	AA 14500	3	1,800	14.5	50.5	18.0	-40 to +85*		●	●			
CR-AG	A 17455	3	2,400	17.0	45.5	22.0	-40 to +85*		●	●		●	
CR-AGZ	A 17455	3	2,700	17.0	45.5	23.0	-40 to +85*		●	●		●	
CR-LAZ**	A 17500	3	3,000	17.0	50.5	25.0	-40 to +85*		●	●		●	

The battery performance is strongly affected by how the batteries are used. The data in this document are for descriptive purposes only and are not intended to make or imply any guarantee or warranty.

* Please consult Panasonic when anticipating usage in operating temperature of 70°C or above. ** Under development

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Panasonic ENERGY

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