

# Pin-type Lithium-ion Battery



July 2023

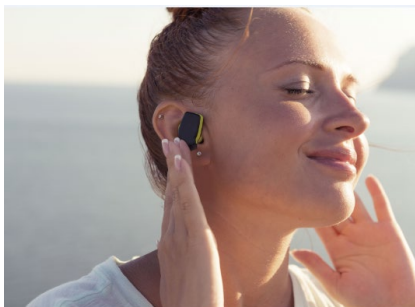
Panasonic Energy Co., Ltd.

Please  
access our  
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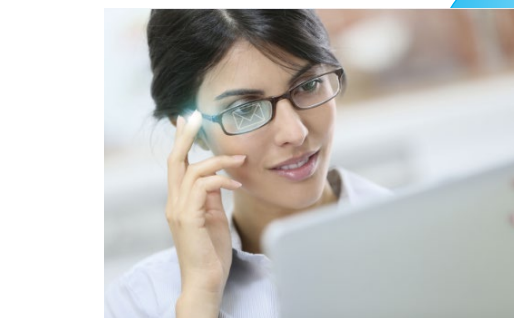


# Pin-type Lithium-ion Battery, suitable for small devices

Wireless Earphones

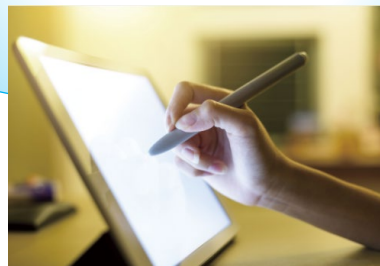


Hearing Aids



Smart Glasses

Stylus Pen



Wristband Devices

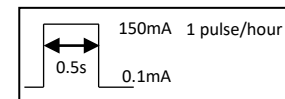




- 1) Super small and slim battery realizes not only stylish designs but also high output.
- 2) A high-strength stainless exterior case provides excellent safety and reliability.
- 3) Possible to select from Rapid charging or Long-life type according to the application.

# 1) Super small and slim, but high output

- ✓ Provides stylish designs for your products, as well as Bluetooth low energy, vibration and other functions which needs big discharging current.



General Li-ion  
18650 size

Diameter : 3.65mm  
Height : 20mm  
Weight : 0.5g

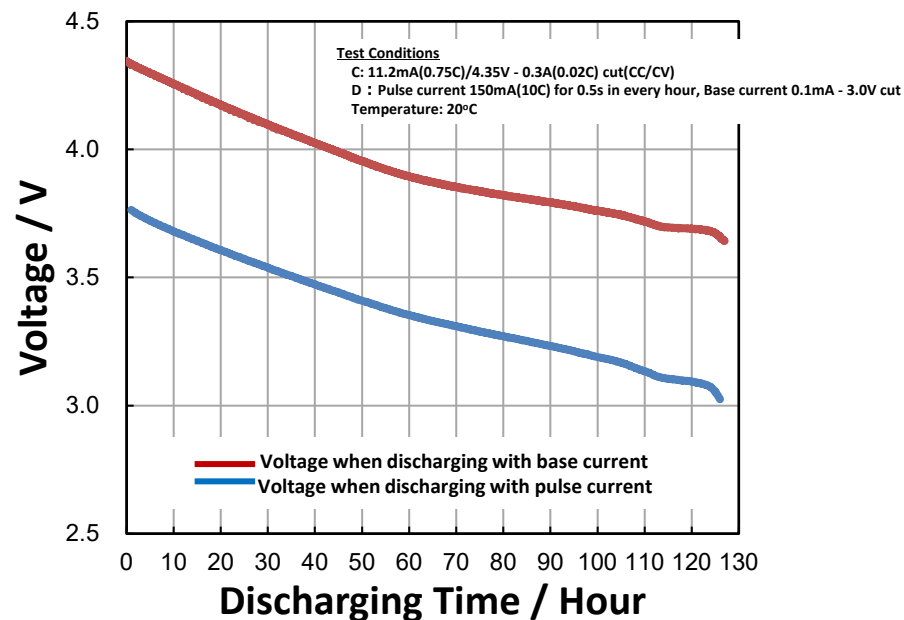
VS



CG-320B

※Image chart

**CG-320B Pulse discharging result with 150mA(10C)**



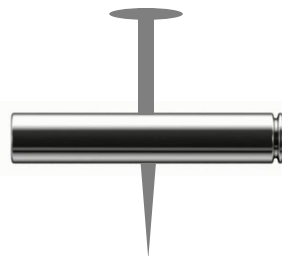
## 2) High-strength stainless case, high safety and high reliability

- ✓ No swelling, no explosion, no fire.
- ✓ Certified by IEC62133/UL1642.

### Test example



Swelling check  
after 1,000 times cycle test



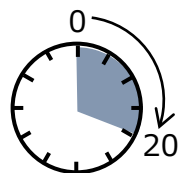
Nail penetration test



Impact test

- ✓ Rapid charging, more user-friendly
- ✓ 3C charging realizes 80% charging in 20 minutes.(CG-420A/425A only)

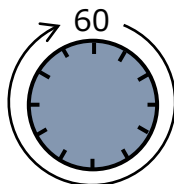
20 min. charging



CG-425A  
CG-420A



60 min. charging



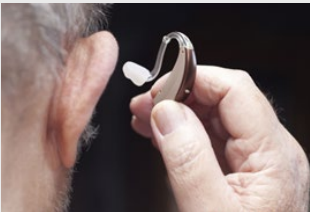


CG-425A  
CG-420A

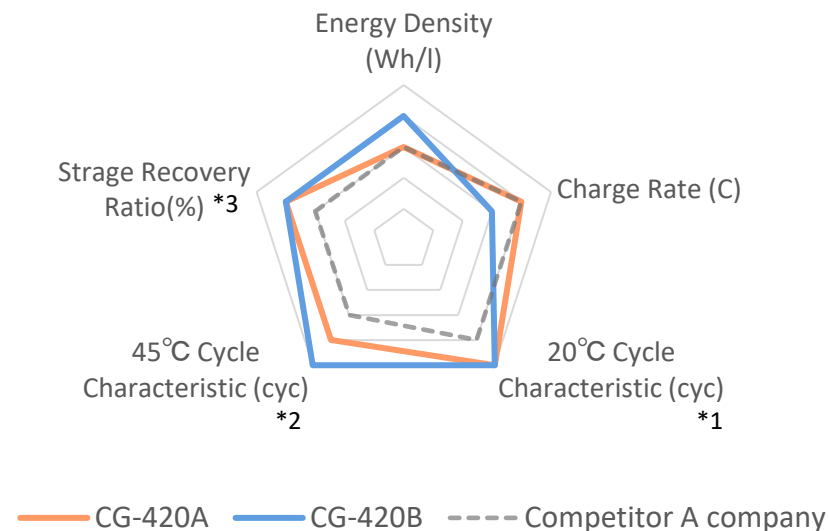


### 3) Possible to select from Rapid charging or Long-life type according to the application

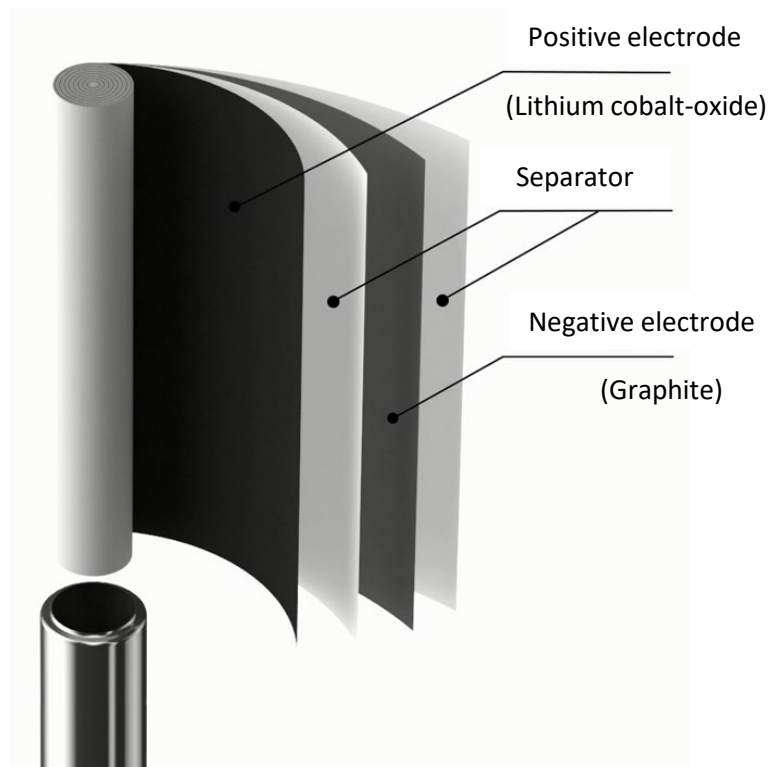
- ✓ Long-life type provides long-term use and long-term reliability (CG-420B)

Type	Rapid charging type	Long-life type
Usage	Frequently used device	Long time or Long-term use device
Application	 	
Model No.	CG-420A CG-425A	CG-420B <b>NEW</b>

### Comparison data of 420 size



\*1 : 20°C Cycle @ capacity ratio 80%  
 \*2 : 45°C Cycle @ capacity ratio 80%  
 \*3 : 60°C 30Days storage recovery ratio



- ☑ Highly skilled battery design technology
- ☑ Highly precise manufacturing technology
- ☑ Highly quality control



# Specification

**NEW**

Part Number		CG-320B	CG-420A	CG-420B	CG-425A
Size*	Diameter(Max.)	3.65mm	4.7mm	4.7mm	4.7mm
	Height(Max.)	20mm	20mm	20mm	25mm
Weight* (Approx.)		0.5g	0.8g	0.9g	1.0g
Typical Capacity		16mAh	23mAh	29mAh	32mAh
Rated Capacity		15mAh	22mAh	27mAh	30mAh
Nominal Voltage			3.8V		
Maximum Charging Voltage			4.35V		
Maximum Continuous Discharging Current		30.0mA(2C)	44.0mA(2C)	54.0mA(2C)	60mA(2C)
Maximum Charging Current		11.2mA(0.75C)	66.0mA(3C)	20.2mA(0.75C)	90.0mA(3C)
Operating Temperature	Charge	0°C ~ 60°C			
	Discharge	-20°C ~ 60°C			
Certifications			IEC62133, UL1642		

\* Without tabs



## Key Benefits

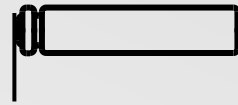
- ✓ Small & Slim
- ✓ Stylish design
- ✓ High safety & reliability
- ✓ Rapid charging
- ✓ Available for Bluetooth low energy, vibration and other functions
- ✓ Long product life time



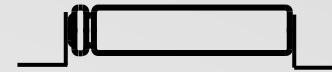
1. **Standard voltage range is 3.0 – 4.35V. Protection required for over-charge/over-discharge. Please prepare protection circuit on the customer side.**
2. **The battery will be shipped with tabs.**  
**Please ask a Panasonic sales person when tab customization is needed.**

## Standard Terminal Types

Through-hole type



Surface mount type



All models have stainless steel tab with tin (Sn) plating.

3. **In order to prevent accidental ingestion of the battery, it must be inaccessible to the individual user / customer.**

# Please feel free to contact us

Panasonic Energy Pin-type Lithium-ion Battery

<https://industrial.panasonic.cn/ea/products/pt/pin-li-ion>