



Accelerating Wearables Era

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Ultimate Flexible Battery

Full-Range Flexibility

LIBEST's flexible battery fits best for any wearable devices.

High Battery Capacity

High areal capacity can extend running time of wearable devices at least more than twice.

Highest Bending Durability

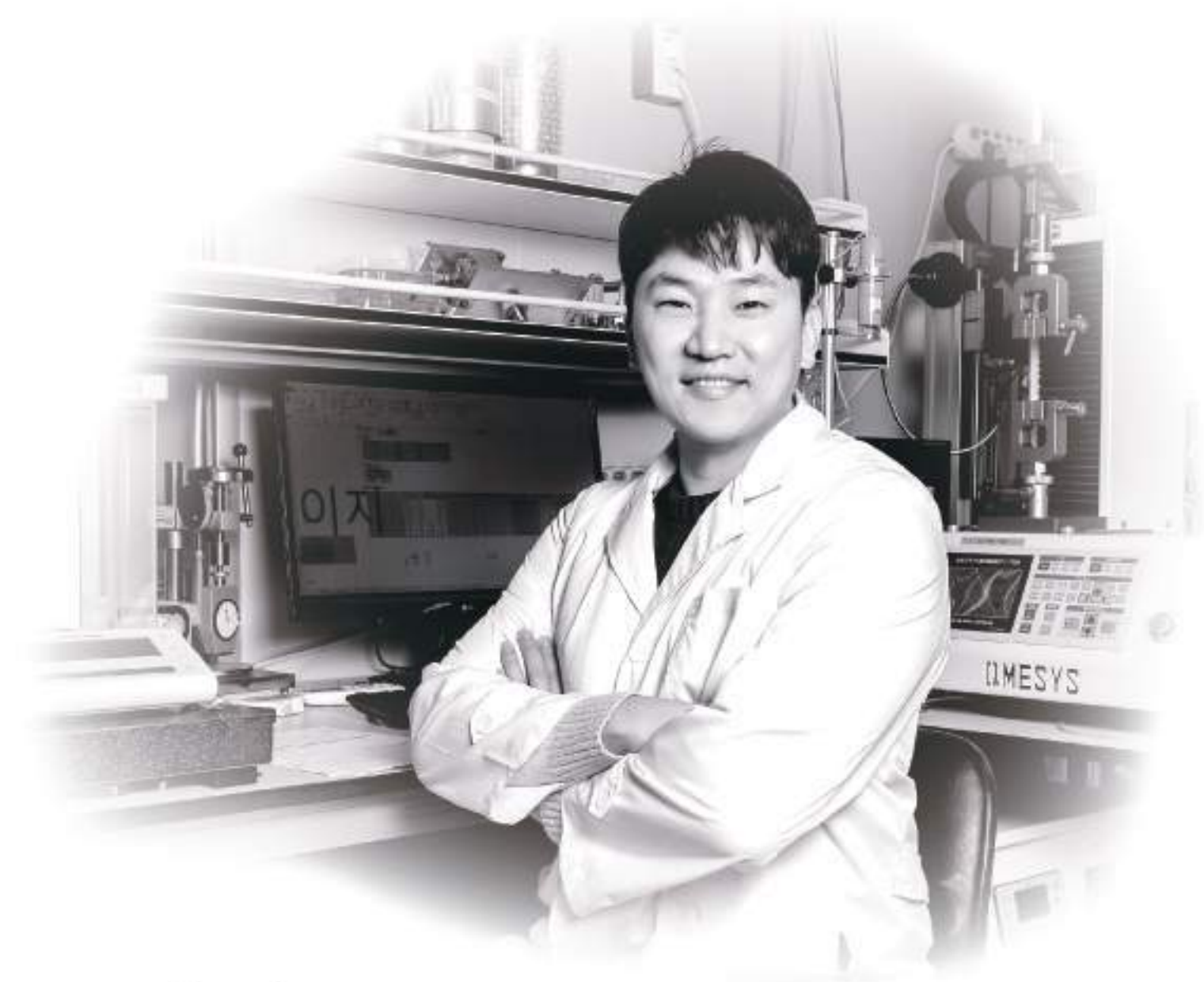
Over 5,000 times bending durability enables longer lifespan of wearable devices.



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Greeting



Dr. Elon Kim
Founder, CEO

Dr. Elon Kim is an energetic Leader with over 10 years of experience in battery technology. He has authored 16 academic papers, which have been cited over 1700 times, and has filed 27 patents in the battery related field.

Message from Elon Kim,

The fourth industrial era will bring innovations in the field of autonomous electric vehicles, wearable devices, cloud, and AI by perceiving the human, object, and knowledge in the aspect of connectivity rather than as a single entity. Everything will be connected and intertwined through a wireless network that is way faster than now, further creating diverse values and synergies by interacting with each other.

Given this prospect, we believe that, as a fundamental energy source for all mobile devices, the battery technology will play a pivotal role in dominating the mobile device market and become a decisive element technology for the success. Therefore, LiBEST is committed to the mission to accelerate the paradigm shift from mobile smartphones to wearable devices using our revolutionary battery technology.

A smartwatch, one of the many types of wearables, not only lets us know the time but also measures and records the user's bio signals like heart rate, electrocardiogram, body temperature, and blood sugar level in real time. It can also collect bio-data based on various categories like age, country, race, and continent, which wasn't possible in the past. Using such data can protect mankind from diseases and allows efficient management of one's health and well-being. That is why the wearable devices are called an astonishing innovation.

However, the limited battery capacity prevents wearables from being fully functional. For this reason, wearables are unable to perform their features to the degree that it can meet the market expectation and still remain as a potential market. We will solve this issue using our flexible battery technology.

Every material and component has its feature to boast. However, the best product comes to life when all the materials and components are harmonized as one solution rather than standing out. This goes the same for batteries. LiBEST's battery is a complex technology that combines all different materials and components to achieve maximum synergy. In the process of creating a new energy source, we persist multifaceted approach by developing distinctive exterior material with improved bending durability, special electrode assemblies satisfying both high energy density and high flexibility, electrode manufacturing technology to improve the physical and chemical durability for high performance of active materials even in the repetitive bending environment, bending reliability through enhanced lead-tap technology, and safety-in-use feature to create internal closure in case of an emergency.

The ability to realize the element technologies is crucial but the more important thing is how well these technologies are harmonized and balanced in the battery system. LiBEST generates detailed data of all element technologies and analyzes, tunes, and optimizes the battery system accordingly. We are proud to say that such a meticulous process and accumulated knowledge are our true technology.

Building on the success of our flexible battery designed specifically for wearables, LiBEST will grow to the top leader in the market. To meet customers' needs, we will continue to pursue a must-have battery that can be harmonized with any type of device and explore to obtain the most optimized battery technology.

Starting from this first step toward the world, we will constantly strive to challenge ourselves and create value.

Thank you.

CEO Elon Kim

Company

The Ultimate Flexible Battery

We are developing and providing a world-class next-generation lithium secondary battery for the innovation that LiBEST Flexible Battery will bring and the better world that the innovation can make.

Social Mission

We partner with various other companies to drive the development of the flexible battery and its various applications in the hope that this innovation contributes to improved healthcare and welfare systems.

CI

Symbolmark



Wordmark

LiBEST

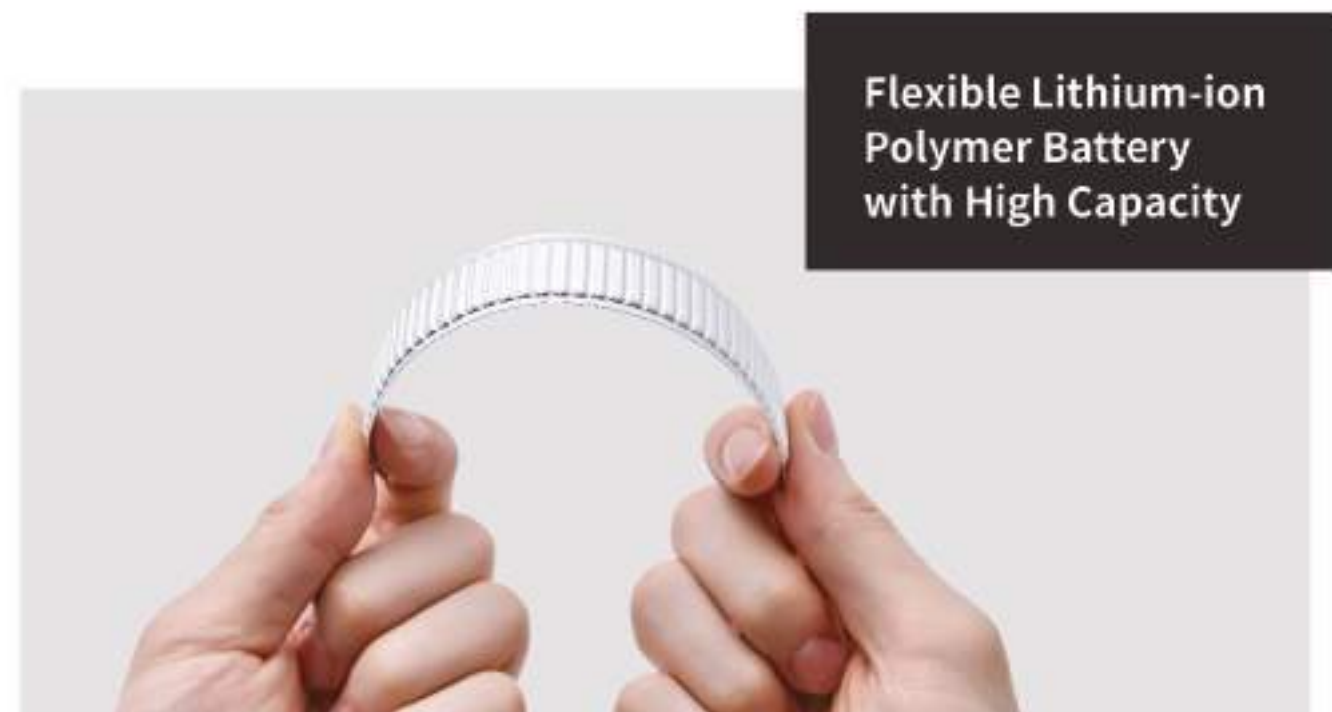
"Li" is the symbol of Lithium, the core material of the battery, and also the first syllable of the company name implying infinite possibilities and vitality. The simplified outlines symbolizing the movement of electrons and energy and the energetic orange color represent the image of an innovative energy company.

Histoty



Awards

Flexible Battery



LIBEST Flexible Battery is the most advanced flexible battery with high capacity and full-range flexibility. Ensuring safety on top of the flexibility, the battery boasts its design and performance that best serve the needs of wearable devices which have been confined to conventional solid cylindrical or rectangular casings.

Key Benefits



Flexibility

With the flexibility that curves around any surface perfectly, LIBEST Flexible Battery can be applied to various wearable devices worn on the wrist, head, neck, waist, or other body parts.

Durability

The battery maintains its stable performance even after at least 5,000 cycles of bending with a radius of 15mm.

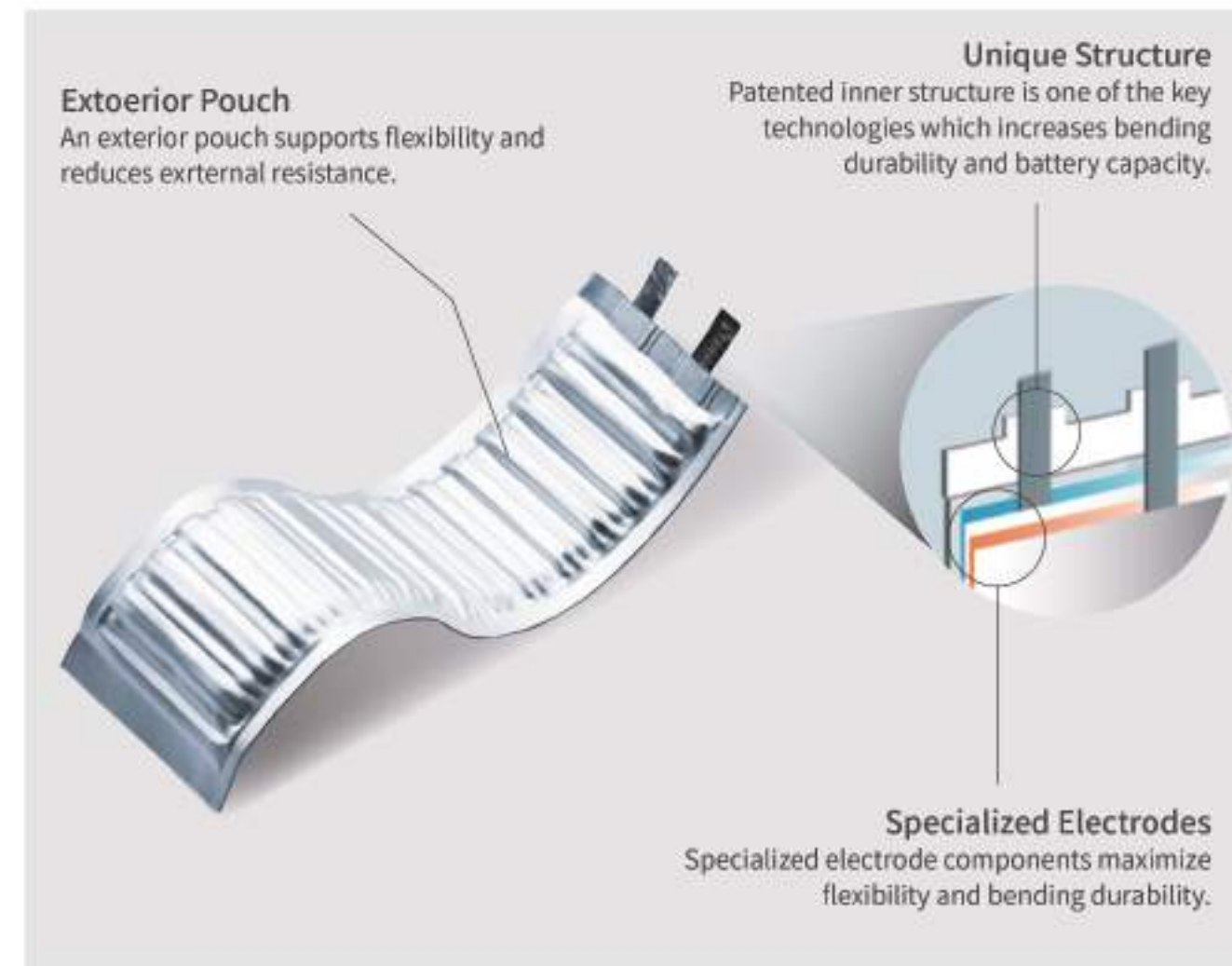
High Capacity

By achieving a higher areal capacity, the battery offers a 3 to 10 times larger capacity without causing any design change to the devices.

Custom Design

The size of LIBEST Flexible Battery can be tailored to each customer's needs.

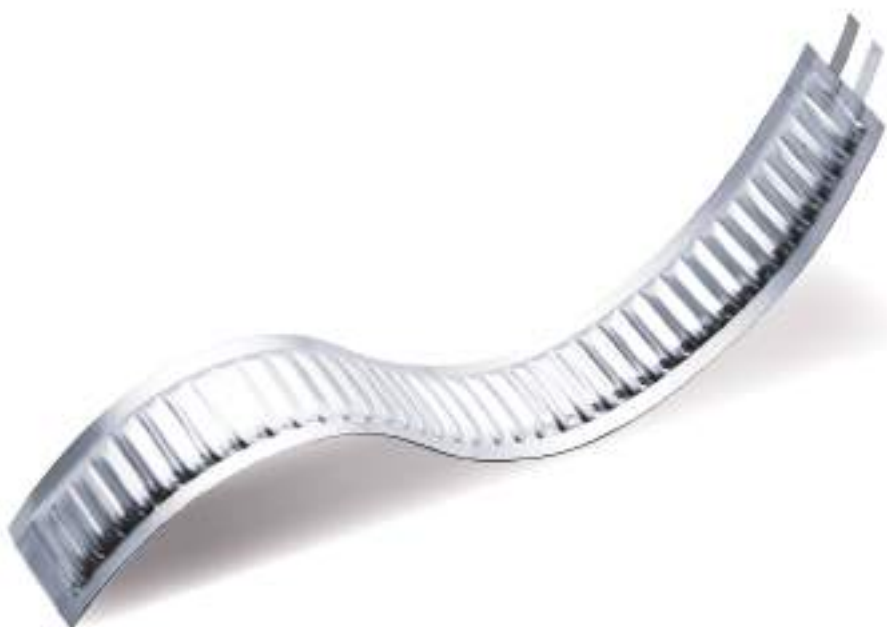
LiBEST's Advanced Technologies



Specifications

| Category | Detail |
|-----------------------|---|
| Type | Rechargeable Lithium Battery |
| Dimension | Customizable |
| Capacity | Depends on size (Typically max 3,000mAh) |
| Operating Voltage | Charge 4.40V/ Discharge 3.00V |
| Operating Temperature | Charge 0°C ~ 45°C/ Discharge -20°C ~ 60°C |
| Nominal Voltage | 3.85V |

Flexible Battery Line Up



| Model | Dimension (mm) | | | Capacity (mAh) | Standard Current (mA) | |
|-----------|----------------|--------|-----------|----------------|-----------------------|-----------|
| | Width | Length | Thickness | | Charge | Discharge |
| 016052C05 | 16 | 52 | 1.95 | 55 | 26 | 26 |
| 017053C07 | 17 | 53 | 2.70 | 84 | 40 | 40 |
| 018054C09 | 18 | 54 | 3.45 | 115 | 54 | 54 |

| Model | Dimension (mm) | | | Capacity (mAh) | Standard Current (mA) | |
|-----------|----------------|--------|-----------|----------------|-----------------------|-----------|
| | Width | Length | Thickness | | Charge | Discharge |
| 014120C05 | 14 | 120 | 1.95 | 115 | 55 | 55 |
| 015121C07 | 15 | 121 | 2.70 | 172 | 84 | 84 |
| 016122C09 | 16 | 122 | 3.45 | 236 | 112 | 112 |

Appilcations

Watch

Vital Patch

Glove

Appilcations

NeckBand

Smat Glasses

Headphone

Flexible Battery Line Up



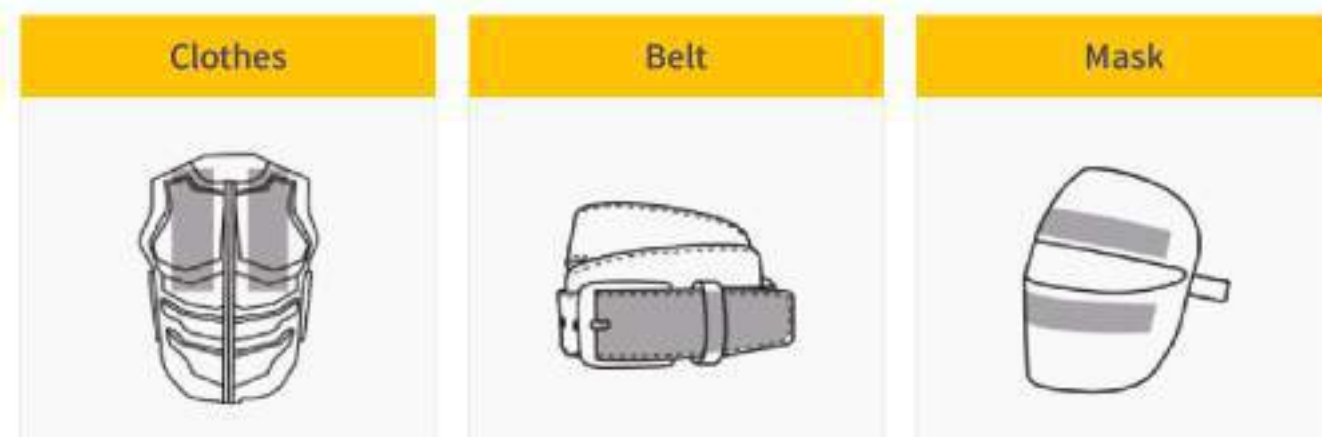
| Model | Dimension (mm) | | | Capacity (mAh) | Standard Current (mA) | |
|-----------|----------------|--------|-----------|----------------|-----------------------|-----------|
| | Width | Length | Thickness | | Charge | Discharge |
| 024069C05 | 24 | 69 | 1.95 | 138 | 65 | 65 |
| 025070C07 | 25 | 70 | 2.70 | 205 | 98 | 98 |
| 026071C09 | 26 | 71 | 3.45 | 280 | 133 | 133 |

Applications



| Model | Dimension (mm) | | | Capacity (mAh) | Standard Current (mA) | |
|-----------|----------------|--------|-----------|----------------|-----------------------|-----------|
| | Width | Length | Thickness | | Charge | Discharge |
| 030067C05 | 30 | 67 | 1.95 | 185 | 88 | 88 |
| 031068C07 | 31 | 68 | 2.70 | 276 | 125 | 125 |
| 032069C09 | 32 | 69 | 3.45 | 370 | 175 | 175 |

Applications



Flexible Battery Line Up

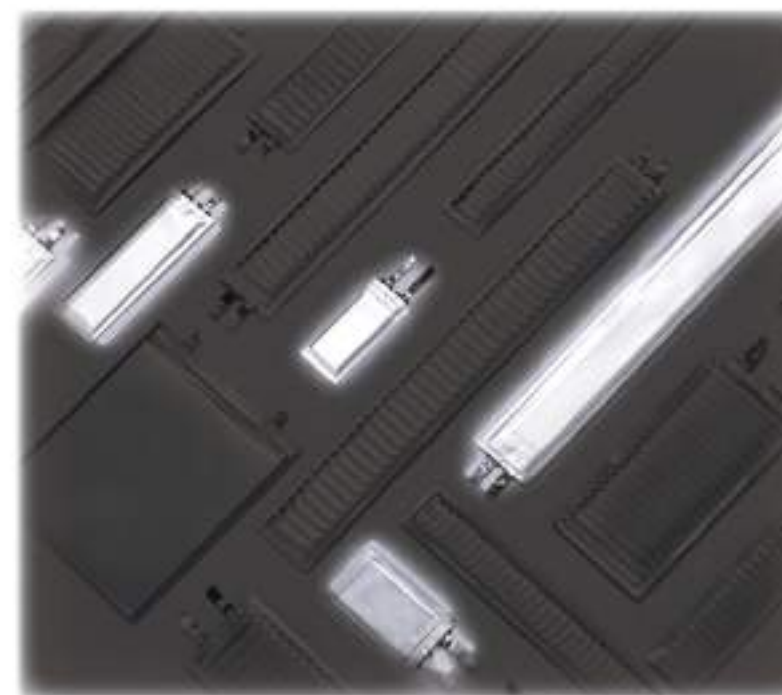


| Model | Dimension (mm) | | | Capacity (mAh) | Standard Current (mA) | |
|-----------|----------------|--------|-----------|----------------|-----------------------|-----------|
| | Width | Length | Thickness | | Charge | Discharge |
| 018154C05 | 18 | 154 | 1.95 | 213 | 101 | 101 |
| 019155C07 | 19 | 155 | 2.70 | 323 | 153 | 153 |
| 020156C09 | 20 | 156 | 3.45 | 425 | 202 | 202 |

Applications



Thin Film



| Model | Dimension (mm) | | | Capacity (mAh) | Standard Current (mA) | |
|-----------|----------------|--------|-----------|----------------|-----------------------|-----------|
| | Width | Length | Thickness | | Charge | Discharge |
| 016052C05 | 16 | 52 | 1.95 | 55 | 26 | 26 |
| 017053C07 | 17 | 53 | 2.70 | 84 | 40 | 40 |
| 018054C09 | 18 | 54 | 3.45 | 115 | 54 | 54 |

Applications



Battery Material & Service



Electrodes: Cathodes and Anodes

LiBEST provides high performance battery materials. With data and knowledge accumulated for years, we supply top quality standard composition electrode sheets and custom produced cathode/anode sheets with your own choice of materials. Customization of materials and specifications – active material, current collector, binder type, loading rate, thickness, width etc – are available. These cathode/anode electrode sheets are suitable for diverse applications.

Cell assembly, testing and optimization services: Coin and Pouch cell

LiBEST offers test-purpose cells to your request. With an effective production line, a cost-competitive customized battery fabrication service is available. Researchers from multinational companies to universities and government organizations looking for cost-competitive and effective solutions are LiBEST's customers. From single unit to hundreds, we serve your need. LiBEST's lithium-ion battery experts all with over a decade of experience will provide helpful guides to your research.

Key Benefits

All operations are conducted in top-notch, recently invested production and test facility located in scientific town of Daejeon, Korea for quality. Our cell and electrode portfolio is a trusted source for battery manufacturers, research organizations and university labs. Now you can get your most-effective and comprehensive battery characterization & testing services including custom electrode sheet fabrication, as well as lithium-ion coin cell and pouch cell fabrication and testing through online. We value our customers' confidentiality and NDA is available.

Equipment List

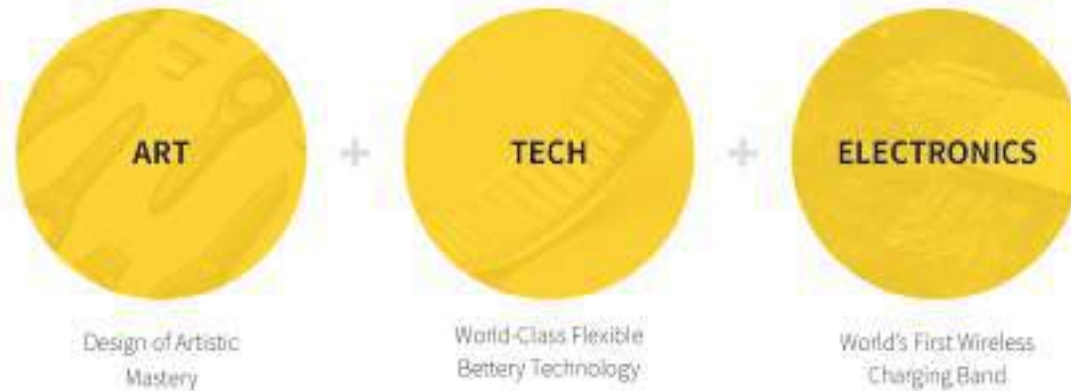
To deliver stable and superior quality, we produce flexible battery from electrode level in our own scalable and economical process.

| No. | Equipment | Quantity | Note |
|-----|---|----------|------|
| 1 | Z-Z Stacking Machine (M/C) | 1 | |
| 2 | Electrode Stacking M/C | 1 | |
| 3 | R2R Hot Comma Coater (W300, 4M) | 1 | |
| 4 | R2R Hot Roll Press (15 ton, $\Phi 300 \times 350$) | 1 | |
| 5 | Battery cell cycler (5V/1A, 128CH) | 1 | |
| 6 | Battery cell cycler (5V/5A, 64CH) | 2 | |
| 7 | Electrode Resistance Meter | 1 | |
| 8 | Cathode Slurry Corona Mix (5L) | 1 | |
| 9 | Anode Slurry Corona Mix (5L) | 1 | |
| 10 | Potentiostat/Galvanostat | 1 | |
| 11 | Degassing M/C | 1 | |
| 12 | Vacuum Sealing M/C | 1 | |
| 13 | Ultrasonic Welder (2000Xea/40MA) | 1 | |
| 14 | Moisture Analyzers | 1 | |
| 15 | Universal Testing Machine | 1 | |
| 16 | Bending Tester (10~150°, 3CH) | 1 | |
| 17 | Forced Convection Oven(#OF-22G,151L) | 2 | |
| 18 | Vacuum Sealing Machine | 1 | |
| 19 | Digimatic thickness gauge | 4 | |
| 20 | Battery Hitester | 2 | |
| 21 | Air Compressor | 1 | |



ARTENIX®

Brand History



The name represents new technologies embracing innovation and style.

Reminding a free-spirited goddess Artemis, ARTENIX is a compound word combining art, tech, and electronics, and brings innovation and a sense of freedom to conventional devices that are trapped in their frame and casing.



Charge Your Watch on Your Wrist

Anytime! Anywhere!

Wireless Charge on Your Wrist!

Now, leave your room, leave the charging cable behind, and lay it on your wrist!

Use your Apple Watch while charging it on your wrist.

The best flexible battery technology allows you to charge your watch anytime, anywhere. Power your Apple Watch on the go. You can charge the watch and still send texts, make calls, talk to Siri and use other features of the watch (except for the heart rate monitoring because the heart rate sensors are the terminals for charging).



Explore the wonder of how ARTENIX Standard Band can improve the experience of your Apple Watch.



Easy Operation!!

Slide, Spin & Click! The revolutionary locking mechanism maximizes the performance of Apple Watch. The Connect Piece which connects the watch to the ARTENIX Standard Band employs a patented metal locking mechanism, allowing you to easily attach and detach the watch. This makes using the Apple Watch more convenient and useful.

Accurate Heart Rate Monitoring!

ARTENIX Standard Band is carefully designed to bend around the wrist of the wearer. Find a perfect hole in the band and adjust the fit for accurate heart rate measurement. The watch won't have any problem monitoring your heart rates.

High-End Design!

Our product is made from premium leather by a Korean leather artisan and comes in four colors: Midnight Black, Classic Brown, Elec Ocean Blue, and Royal Red.

