

NEWARE

NEWARE
— Since 1998 —



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Note: This document may undergo version changes without further notice.
We apologize for any inconvenience this may cause.

Turnkey Solution for Battery Testing



LabTech



Store



Client



Step



DataAnalyzer



Edge



LIMS



Analytics



Report



Calibration



Tele-Control & Tech-Support
Smart-Lab Solutions Platform



Tailor-Made & Worry-Free
One-Stop Purchasing Platform

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CT-4000 mA-Equipment (3 Ranges)

Main Functions



Cycle Life Test



Rate Charging / Discharging Test



Pulse Simulation Test

GITT

GITT Test

DCIR

DCIR Test



dQ/dV Curve



Product Characteristics



Voltage & Current Accuracy
 $\pm 0.05\%$ F.S.



Recording Frequency
10Hz



Sampling Time
100ms



Current Response Time
(10% F.S. ~ 90% F.S.)
< 500 μ s



Resolution Ratio AD
24Bit



Off-Line Test
1GB



μ A Level Current Output



Test Security



Data Security

01



02



03



04



Range	Range 1	Range 2	Range 3
Voltage & Current			
5V/10V10mA	5 μ A ~ 1mA	1mA ~ 5mA	5mA ~ 10mA
5V/10V20mA	5 μ A ~ 1mA	1mA ~ 10mA	10mA ~ 20mA
5V/10V50mA	5 μ A ~ 1mA	1mA ~ 25mA	25mA ~ 50mA

*Other models can be customized according to voltage and current requirements.

- Suitable for Coin Cells, Small Capacity Batteries, Small Pouch Cells, Super Capacitors, Three-Electrode System Testing, etc.
- 8 independent channels each.
- Supports testing including Cycle Life, Rate Performance, Pulse Simulation, GITT, DCIR, and dQ/dV Analysis.
- Charging & Discharging modes: Constant Current, Constant Voltage, Constant Current & Voltage, Constant Power, Constant Resistance.
- Safety features such as shutdown, off-line testing, and overheating protection.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

CT-4000 mA-Equipment (4 Ranges)

Main Functions



Cycle Life
Test



Rate Charging
/ Discharging
Test



Pulse Simulation
Test

GITT

GITT
Test

DCIR

DCIR
Test



dQ/dV
Curve



Works With
NEWARE LabTech

Product Characteristics



4 Ranges



Voltage & Current
Accuracy
 $\pm 0.01\%$ F.S.



Recording Frequency
100Hz



Sampling Time
10ms



Current Response Time
(10% F.S. ~ 90% F.S.)
 $\leq 1\text{ms}$



Resolution Ratio AD
24Bit



Off-Line Test
1GB



μA Level Current
Output



Test Security



Data Security

01



02



03



04



Range	Range 1	Range 2	Range 3	Range 4
Voltage & Current				
5V100mA	0.2 μA ~ 0.1mA	0.1mA ~ 1mA	1mA ~ 10mA	10mA ~ 100mA

*Other models can be customized according to voltage and current requirements.

- Suitable for Coin Cells, Small Capacity Batteries, Small Pouch Cells, Super Capacitors, Three-Electrode System testing, etc.
- 8 independent channels each.
- Features micro-flow testing down to μA level.
- 4-range high-precision testing intervals.
- Supports testing including Cycle Life, Rate Performance, Pulse Simulation, GITT, DCIR, and dQ/dV Analysis.
- Safety features such as shutdown, off-line testing, and overheating protection.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

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CT-4000 5V6A & 5V12A (3 Ranges)

Main Functions



Cycle Life Test



Rate Charging / Discharging Test



Pulse Simulation Test

GITT

GITT Test

DCIR

DCIR Test



dQ/dV Curve



Product Characteristics



Voltage & Current Accuracy
 $\pm 0.05\%$ F.S.



Recording Frequency
10Hz



Sampling Time
100ms



Current Response Time
(10% F.S. ~ 90% F.S.)
 $\leq 1\text{ms}$



Resolution Ratio AD
24Bit



Off-Line Test
1GB



Test Security



Data Security

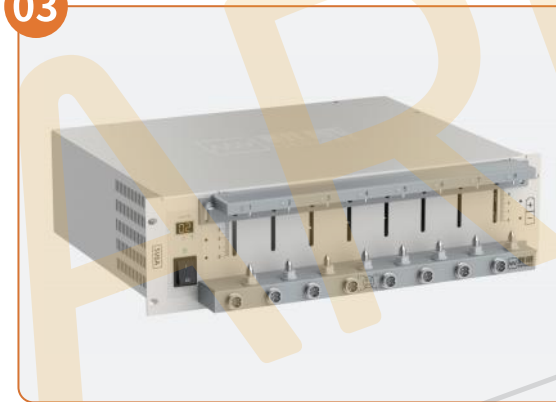
01



02



03



04



	Range	Range 1	Range 2	Range 3
Voltage & Current				
5V6A		0.5mA ~ 0.1A	0.1A ~ 3A	3A ~ 6A
5V12A		5mA ~ 1A	1A ~ 6A	6A ~ 12A

*Other models can be customized according to voltage and current requirements.

- Suitable for testing Cylindrical and Pouch Cells for 3C digital products, meeting various testing requirements of battery /3C Manufacturers and Research Institutions.
- 8 independent channels each.
- Supports testing including Cycle Life, Rate Performance, Pulse Simulation, GITT, DCIR, and dQ/dV Analysis.
- Charging & Discharging modes: Constant Current, Constant Voltage, Constant Current & Voltage, Constant Power, Constant Resistance.
- Safety features such as shutdown, off-line testing, and overheating protection.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

CT-4000 Super-Capacitor Testing System



Main Functions



Cycle Life Test



Rate Charging / Discharging Test



Pulse Simulation Test

GITT

GITT Test

DCIR

DCIR Test



dQ/dV Curve



Product Characteristics



Voltage & Current Accuracy
 $\pm 0.05\%$ F.S.



Recording Frequency
10Hz



Sampling Time
100ms



Current Response Time
(10% F.S. ~ 90% F.S.)
 $\leq 1\text{ms}$



Resolution Ratio AD
24Bit



Off-Line Test
1GB



μA Level Current Output



Test Security



Data Security

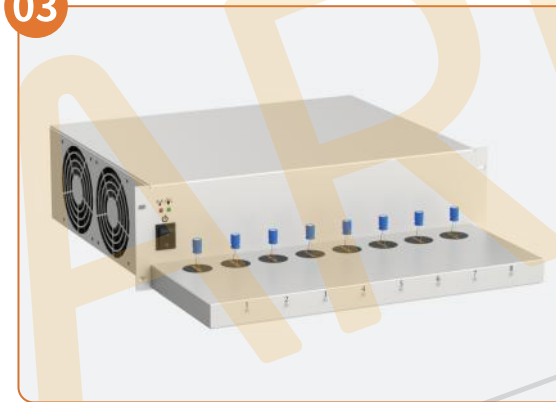
01



02



03



04



Range	Range 1	Range 2	Range 3
5V10mA	5 μA ~ 1mA	1mA ~ 5mA	5mA ~ 10mA
5V6A	0.5mA ~ 0.1A	0.1A ~ 3A	3A ~ 6A
5V12A	5mA ~ 1A	1A ~ 6A	6A ~ 12mA

*Other models can be customized according to voltage and current requirements.

- Compatible with performance testing of various types of Super Capacitors, meeting various testing requirements of 3C/Battery Manufacturers and Research Institutions.
- 8 independent channels each.
- Supports testing including Cycle Life, Rate Performance, Pulse Simulation, GITT, DCIR, and dQ/dV Analysis.
- Charging & Discharging modes: Constant Current, Constant Voltage, Constant Current & Voltage, Constant Power, Constant Resistance.
- Safety features such as shutdown, off-line testing, and overheating protection.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

CT-5000 5V6A & 5V12A (3 Ranges)

Main Functions



Cycle Life
Test



Rate Charging
/ Discharging
Test



Pulse Simulation
Test

GITT

GITT
Test

DCIR

DCIR
Test



dQ/dV
Curve



Product Characteristics



Voltage & Current
Accuracy
 $\pm 0.02\%$ F.S.



Recording Frequency
100Hz



Current Response Time
(10% F.S. ~ 90% F.S.)
< 2ms



Resolution Ratio AD
16Bit



Off-Line Test
1GB



Test Security



Data Security

SMB

SMBus
Communication

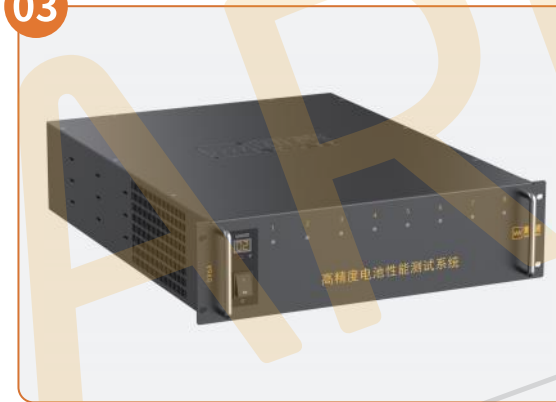
01



02



03



04



Range	Range 1	Range 2	Range 3
Voltage & Current			
5V6A	0A ~ 0.2A	0.2A ~ 1A	1A ~ 6A
5V12A	0A ~ 1A	1A ~ 4A	4A ~ 12A

*Other models can be customized according to voltage and current requirements.

- Suitable for performance testing of battery cells such as Coin, Pouch, and Cylindrical types, can meet the testing needs of institutions such as Universities, Materials Research, and Battery Manufacturers.
- 8 independent channels each.
- Supports testing including Cycle Life, Rate Performance, Pulse Simulation, DCIR, and dQ/dV Analysis.
- Channel uses constant current and constant voltage sources in a dual closed-loop structure.
- Safety features such as power-off protection, offline testing, overheating protection, and reverse connection prevention.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

CTE-5016-5V75A-DSP



Main Functions



Cycle Life
Test



Rate Charging
/ Discharging
Test



Pulse Simulation
Test

GITT

GITT
Test

DCIR

DCIR
Test



Product Characteristics



Voltage Accuracy
 $\pm 0.02\%$ F.S.



Voltage & Current
Accuracy
 $\pm 0.05\%$ F.S.



Recording Frequency
100Hz



Current Response Time
(10% F.S. ~ 90% F.S.)
 $\leq 1\text{ms}$



Resolution Ratio AD
16Bit



Off-Line Test
1GB



μA Level Current
Output



Test Security



Data Security



Energy-saving Inverter

01



02



03



04



5V

75A

150A

300A

600A

1200A

10kA

*CTE-5000: E indicates the energy feedback function.

*Other models can be customized according to voltage and current requirements.

- Suitable for Electric Bicycles, Electric Vehicles, and related fields.
- SMBus/I2C communication capabilities.
- Modular design with 16 independent channels per unit.
- Supports parallel connections between adjacent channels and DBC format file import, editing, and export.
- Supports Cycle Life, Rate Charge/Discharge, Pulse Simulation, and DCIR Testing.
- Safety features such as power-off protection, offline testing, overheating protection, and reverse connection prevention.
- Can recover and redistribute energy produced by battery discharge.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

CE-5000 Laptop Battery Testing System

Main Functions



Cycle Life Test



Rate Charging / Discharging Test



Pulse Simulation Test

GITT

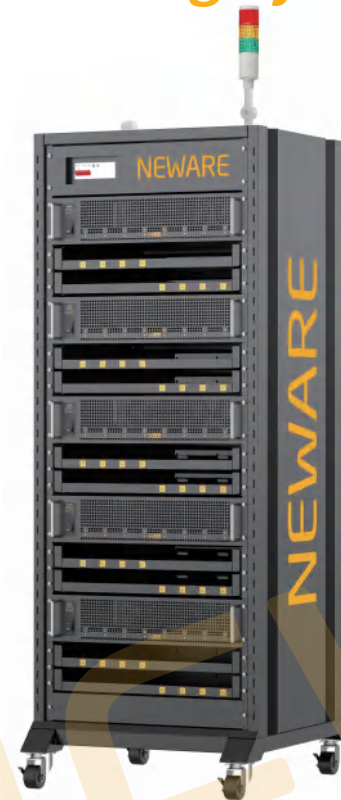
GITT Test

DCIR

DCIR Test



dQ/dV Curve



Product Characteristics



Voltage & Current Accuracy
 $\pm 0.02\%$ F.S.



Recording Frequency
100Hz



Current Response Time
(10% F.S. ~ 90% F.S.)
 $\leq 30\text{ms}$



Resolution Ratio AD
16Bit



Off-Line Test
1GB



Test Security



Data Security

SMB

SMBus Communication



Energy-saving Inverter

01



02



03



04



20V/24V/30V

10A

15A

20A

30A

*CE-5000: E indicates the energy feedback function.

*Other models can be customized according to voltage and current requirements. (10V ~ 30V, 5A ~ 30A)

- Suitable for Laptop Batteries, Tablet Batteries, and Power Tool Batteries, etc.
- SMBus/I2C communication capabilities.
- Modular design with 8 independent channels per unit.
- Supports parallel connections between adjacent channels and DBC format file import, editing, and export.
- Supports Cycle Life, Rate Charge/Discharge, Pulse Simulation, DCIR Testing and dQ/dV Analysis.
- Channel uses constant current and constant voltage sources in a dual closed-loop structure.
- Safety features such as power-off protection, offline testing, overheating protection.
- Can recover and redistribute energy produced by battery discharge.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

CE-6000 Cell Testing System

Main Functions



Cycle Life Test



Rate Charging / Discharging Test



Pulse Simulation Test

DCIR

DCIR Test



Working Condition Simulation Test



Product Characteristics



Voltage & Current Accuracy
 $\pm 0.05\%$ F.S.



Recording Frequency
100Hz



Current Response Time
(10% F.S. ~ 90% F.S.)
 $\leq 2\text{ms}$



Current Response Time
 $\leq 5\text{ms}$



Resolution Ratio AD
24Bit



Feedback Efficiency(Max)75%
(More than 80% output power)



Minimum Pulse Width
20ms



Test Security

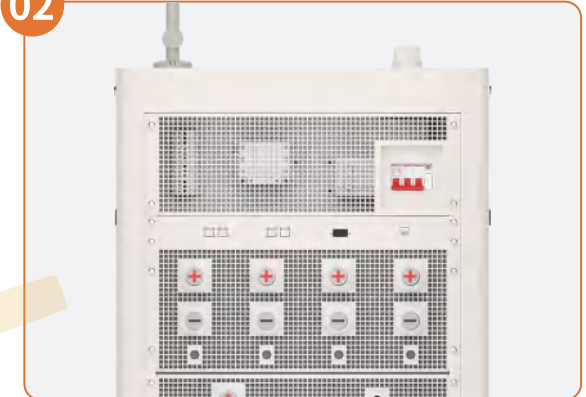


Data Security

01



02



03



04



5V / 6V

75A

150A

300A

600A

1200A

*CE-6000: E indicates the energy feedback function.

*Other models can be customized according to voltage and current requirements.

- Suitable for Power Batteries, Energy Storage Batteries, and other fields, to meet the testing needs of Battery Manufacturers, Electric Vehicle Manufacturers, and Energy Storage Companies.
- Supports comprehensive performance indicators testing such as Cycle Life, Capacity, Efficiency, Working Conditions, Float Performance, SOC, DOD, and Rate.
- Can recover and redistribute energy produced by battery discharge.
- Adopts AC/DC, DC/DC dual-stage high-frequency isolation modular design, combined with low-temperature drift, high-performance multi-channel 24-bit ADC chip, and steady-state accuracy is higher than traditional equipment.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

CE-6000 Module Testing System



Main Functions

Cycle Life Test

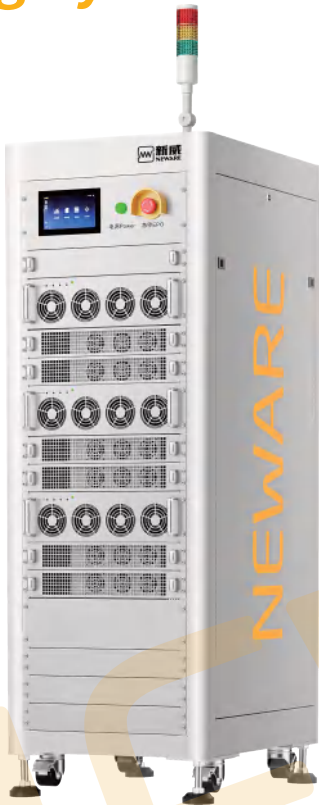
Rate Charging / Discharging Test

Pulse Simulation Test

DCIR

DCIR Test

Working Condition Simulation Test



Product Characteristics

Voltage & Current Accuracy
±0.02% F.S.

Voltage Accuracy
±0.05% F.S.

Recording Frequency
100Hz

Current Response Time
(10% F.S. ~ 90% F.S.)
<3ms

Current Response Time
≤6ms

Resolution Ratio AD
24Bit

Feedback Efficiency(Max)
90%

Minimum Pulse Width
100ms

Test Security

Data Security



20V≤V≤60V	60A	120A	240A	480A	960A	1200A	—
60V<V≤120V	50A	100A	200A	400A	600A	800A	1000A
120V≤V≤200V	50A	100A	200A	300A	400A	500A	—

*CE-6000: E indicates the energy feedback function.
*Other models can be customized according to voltage and current requirements.

- Used for performance testing of Battery Modules by Battery Manufacturers, Electric Vehicle Manufacturers, and Energy Storage Companies.
- Supports comprehensive performance indicators testing such as Cycle Life, Capacity, Efficiency, Working Conditions, Float Performance, SOC, DOD, and Rate.
- Can recover and redistribute energy produced by battery discharge.
- Adopts AC/DC, DC/DC dual-stage high-frequency isolation modular design, combined with low-temperature drift, high-performance multi-channel 24-bit ADC chip, and steady-state accuracy is higher than traditional equipment.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

CE-6000 Pack Testing System

Main Functions



Cycle Life Test



Rate Charging / Discharging Test



Pulse Simulation Test

DCIR

DCIR Test



Working Condition Simulation Test



Product Characteristics



Voltage & Current Accuracy
 $\pm 0.05\%$ F.S.



Recording Frequency
100Hz



Current Response Time
(10% F.S. ~ 90% F.S.)
 $\leq 5\text{ms}$



Current Response Time
 $\leq 10\text{ms}$



Resolution Ratio AD
24Bit



Off-Line Test
1GB



Feedback Efficiency(Max)
94%



Minimum Pulse Width
100ms



Test Security



Data Security

01



02



03



04



100kW	500V	200A
150kW	750V	200A
300kW	1000V	300A

*CE-6000: E indicates the energy feedback function.

*Other models can be customized according to voltage, current and power requirements. (200V ~ 1000V, 100A ~ 1000A)

- Tests Battery Pack performance for Battery Manufacturers, EV Manufacturers, and Energy Storage Companies.
- Supports comprehensive performance indicators testing such as Cycle Life, Capacity, Efficiency, Working Conditions, Float Performance, SOC, DOD, and Rate.
- Can recover and redistribute energy produced by battery discharge.
- Adopts AC/DC, DC/DC dual-stage high-frequency isolation modular design, combined with low-temperature drift, high-performance multi-channel 24-bit ADC chip, and steady-state accuracy is higher than traditional equipment.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

CT/CTE-8000 Simulation Battery Testing System

Main Functions



Cycle Life Test



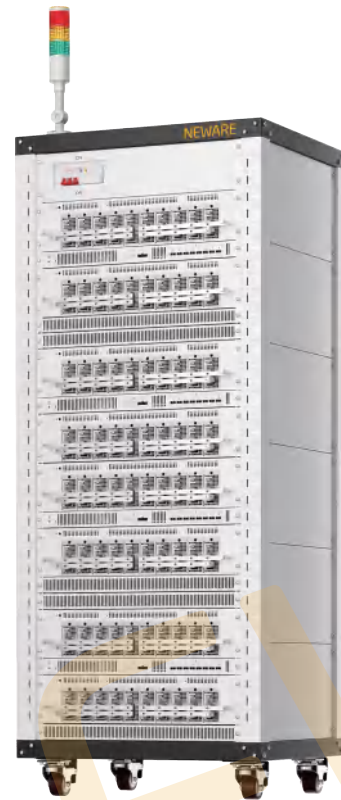
Rate Charging / Discharging Test



Pulse Simulation Test



HPPC



Product Characteristics



Voltage & Current Accuracy
±0.05% F.S.



Sampling Time
10ms



Current Response Time
≤10ms(CTE)
≤20ms(CT)



Minimum Pulse Width
100/500ms



Resolution Ratio AD
16Bit



Off-Line Test
1GB



Working Condition Simulation
1,000,000 Rows



Test Security

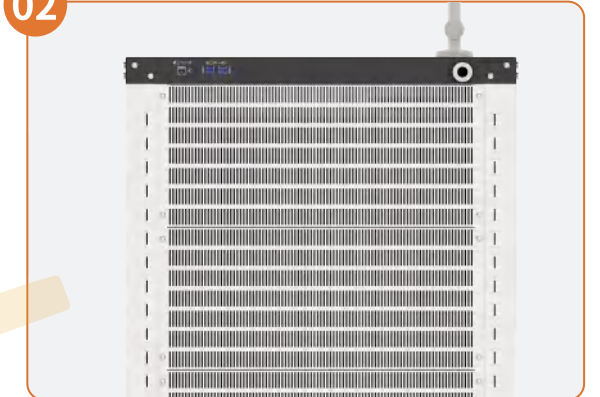


Data Security

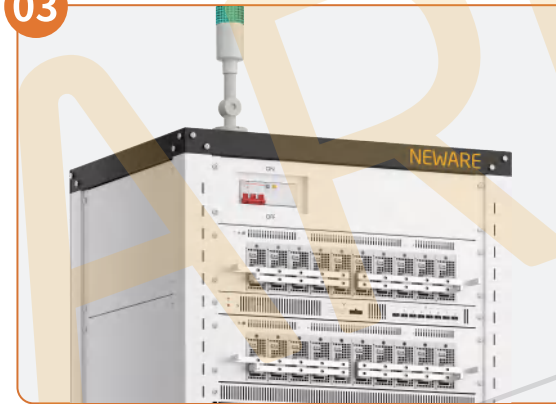
01



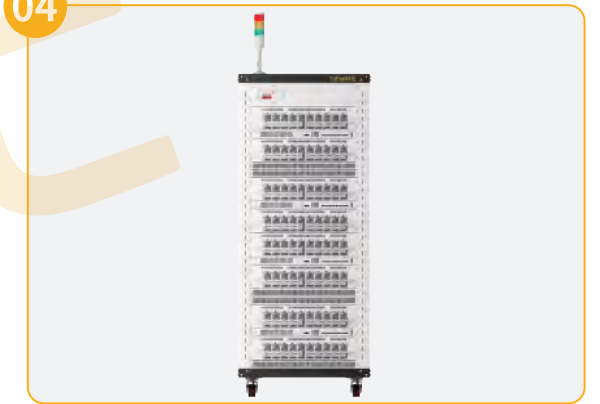
02



03



04



CTE-8000	5V	100A	200A	300A	500A	600A
CT-8000	5V	30A	50A	100A	200A	300A
		200A	600A	800A	1000A	—

*CTE-8000: E indicates the energy feedback function.

*Other models can be customized according to voltage and current requirements.

- Suitable for Power Batteries, Energy Storage Batteries, and other fields, to meet the testing needs of Battery Manufacturers, Electric Vehicle Manufacturers, and Energy Storage Companies.
- Supports comprehensive performance indicators testing such as Cycle Life, Capacity, Efficiency, Working Conditions, Float Performance, SOC, DOD, and Rate.
- Can recover and redistribute energy produced by battery discharge.
- Adopts AC/DC, DC/DC dual-stage high-frequency isolation modular design, combined with low-temperature drift, high-performance multi-channel 16-bit ADC chip, and steady-state accuracy is higher than traditional equipment.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

CT-9000 Ultra-Precision Battery Testing System

Main Functions



Cycle Life Test



Rate Charging / Discharging Test



Pulse Simulation Test

DCIR

DCIR Test



dQ/dV Curve



Product Characteristics



Voltage & Current Accuracy $\pm 0.02\%$ F.S.



Recording Frequency 1000Hz



Current Response Time $\leq 100\mu s$



Minimum Pulse Width 400 μs



Resolution Ratio AD 16Bit



Off-Line Test 1GB



Test Security



Data Security



SMBus Communication



GSM

01



02



03



04



Range	Range 1	Range 2	Range 3	Range 4
5V6A	0.1 μA ~ 180 μA	180 μA ~ 6mA	6mA ~ 180mA	180mA ~ 6A
5V12A	0.1 μA ~ 300 μA	300 μA ~ 10mA	10mA ~ 300mA	300mA ~ 12A

*Other models can be customized according to voltage and current requirements.

- For precise testing of batteries such as Coin Cells, Pouch Cells, and Three-Electrode System in Academic, Research, and 3C Industry Settings.
- Modular design with 4 or 8 independent channels per unit.
- Supports cycle Life Testing, Rate Charge/Discharge Testing, DCIR Testing, Pulse Charge/Discharge Testing, etc.
- High sampling accuracy, fast response time, high control precision, wide measurement range.
- Part of NEWARE's high-end series with a test current as low as 0.1 μA .
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

Coin Cell All-in-One Testing System



Main Functions



Cycle Life
Test



Rate Charging
/ Discharging
Test

GITT

GITT
Test

DCIR

DCIR
Test



Constant Temperature
Test



Product Characteristics



Voltage & Current
Accuracy
 $\pm 0.01\%$ F.S.



Recording Frequency
100Hz



Number of Channels
(Coin Cells)
160CH



Environment Temperature
 $5^{\circ}\text{C} \sim 35^{\circ}\text{C}$



Temperature Range &
Deviation
 $0^{\circ}\text{C} \sim 60^{\circ}\text{C} \pm 2.0^{\circ}\text{C}$
(No Load & Stable
Temperature)



Temperature Fluctuation
 $\leq 1^{\circ}\text{C}$
(No Load & Stable
Temperature)



Heating Time
 $25^{\circ}\text{C} \sim 60^{\circ}\text{C} (\leq 30\text{min})$

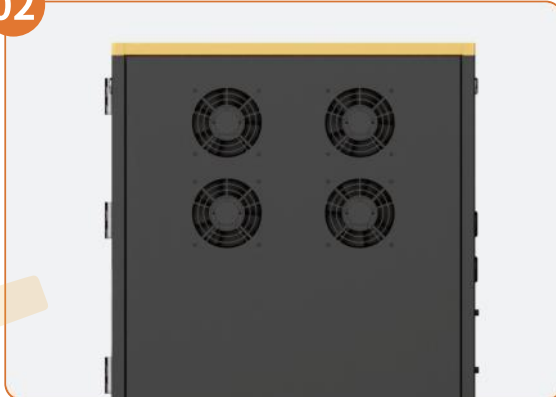


Cooling Time
 $25^{\circ}\text{C} \sim 0^{\circ}\text{C} (\leq 50\text{min})$

01



02



03



04



Model Number	MIHW-200-160CH-B			
Nominal Specification	200L; 160CH			
Internal Size(mm)	500 × 500 × 800			
Overall Size(mm)	600 × 920 × 1800			

Range	Range 1	Range 2	Range 3	Range 4
Voltage & Current				
5V100mA	$0.2\mu\text{A} \sim 0.1\text{mA}$	$0.1\text{mA} \sim 1\text{mA}$	$1\text{mA} \sim 10\text{mA}$	$10\text{mA} \sim 100\text{mA}$

*Other models can be customized according to voltage and current requirements.

- Combines charge-discharge and constant temperature testing for efficient and precise battery temperature performance testing.
- Supports Cycle Life, Temperature Condition, and Reliability Testing.
- Uses combined air regulation channel.
- Connects to BTS communication protocol to set temperature parameters and control conditions.
- Complete equipment protection function with leak detection, short circuit, high temperature fuse, independent redundancy, and over-temperature protection.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

3C All-in-One Testing System



Main Functions



Cycle Life Test



Pulse Simulation Test

DCIR

DCIR Test



Rate Charging / Discharging Test

GITT

GITT Test



Constant Temperature Test



Product Characteristics



Voltage & Current Accuracy
 $\pm 0.05\%$ F.S.



Test Security



Sampling Time
100ms



Data Security



Temperature Range & Deviation
 $10^{\circ}\text{C} \sim 85^{\circ}\text{C}$

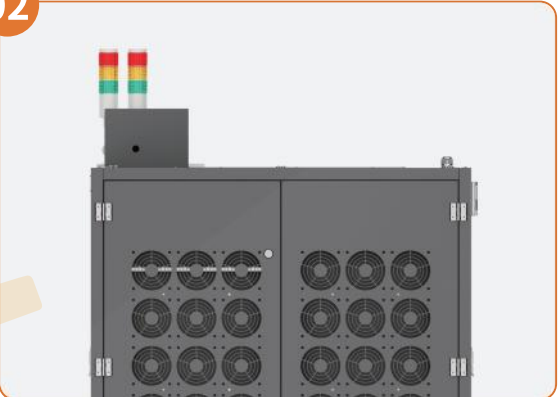


Temperature Deviation
 $\pm 2.0^{\circ}\text{C}$
(No Load & Stable Temperature)

01



02



03



04



Model Number	MHW-500-5V6A80CH-380V / MHW-500-5V12A80CH-380V		
Nominal Specification	500L; 80CH		
Internal Size(mm)	700 × 700 × 1000		
Overall Size(mm)	1100 × 1700 × 1950		
Range		Range 1	Range 2
Voltage & Current		Range 3	
5V6A	0.5mA ~ 0.1A	0.1A ~ 3A	3A ~ 6A
5V12A	5mA ~ 1A	1A ~ 6A	6A ~ 12A

*Other models can be customized according to voltage and current requirements.

- For Pouch Cell charging, discharging, and temperature performance.
- Supports Cycle Life, Constant Temperature, Temperature Conditioning, and Reliability Testing.
- Accommodates up to 80 Pouch Cells with efficient spatial layout.
- Connects to BTS communication protocol for temperature and process control settings.
- PID algorithm calculates and controls heater output for dynamic balance based on set temperature.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

4 Temperature Zone All-in-One Testing System

Main Functions



Cycle Life
Test



Rate Charging
/ Discharging
Test

GITT

GITT
Test

DCIR

DCIR
Test



Constant Temperature
Test



Product Characteristics



Space Saving
< 0.5m²



Voltage & Current
Accuracy
± 0.05% F.S.



Sampling Time
100ms



Number of Channels
(Coin Cells)
4 × 16CH



Temperature Range &
Deviation
15°C ~ 60°C ± 2.0°C
(No Load & Stable
Temperature)



Temperature Fluctuation
≤ 1°C
(No Load & Stable
Temperature)



Heating Time
25°C ~ 60°C (≤ 50min)
(No Load & Stable
Temperature)



Cooling Time
25°C ~ 15°C (≤ 60min)
(No Load & Stable
Temperature)

01



02



03



04



Model Number	MHW-25-S-16CH
Nominal Specification	25L × 4; 16CH × 4
Internal Size(mm)	360 × 300 × 235
Overall Size(mm)	440 × 580 × 410

Range	Range 1	Range 2	Range 3
Voltage & Current			
5V / 10V10mA	5μA ~ 1mA	1mA ~ 5mA	5mA ~ 10mA
5V / 10V20mA	5μA ~ 1mA	1mA ~ 10mA	10mA ~ 20mA
5V / 10V50mA	5μA ~ 1mA	1mA ~ 25mA	25mA ~ 50mA

*Other models can be customized according to voltage and current requirements.

- Combines charge-discharge and constant temperature testing for efficient and precise battery temperature performance testing.
- Supports Cycle Life, Constant Temperature, Temperature Conditioning, and Reliability Testing.
- Accommodates up to 64 Coin Cells with efficient spatial layout.
- Connects to BTS communication protocol for temperature and process control settings.
- Complete equipment protection function with leak detection, short circuit, high temperature fuse, independent redundancy, and over-temperature protection.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

Main Functions



Cycle Life Test



Rate Charging / Discharging Test

GITT

GITT Test

DCIR

DCIR Test



Constant Temperature Test



Product Characteristics



Space Saving
< 0.5m²



Voltage & Current Accuracy
±0.05% F.S.



Sampling Time
100ms



Number of Channels (Coin Cells)
16CH



Temperature Range & Deviation
15°C ~ 60°C ± 2.0°C
(No Load & Stable Temperature)



Temperature Fluctuation
≤ 1°C
(No Load & Stable Temperature)



Heating Time
25°C ~ 60°C (≤ 50min)
(No Load & Stable Temperature)



Cooling Time
25°C ~ 15°C (≤ 60min)
(No Load & Stable Temperature)

01



02



03



04



Model Number	MHW-25-S-16CH
Nominal Specification	25L; 16CH
Internal Size(mm)	360 × 300 × 235
Overall Size(mm)	440 × 580 × 410

Range	Range 1	Range 2	Range 3
Voltage & Current			
5V / 10V10mA	5μA ~ 1mA	1mA ~ 5mA	5mA ~ 10mA
5V / 10V20mA	5μA ~ 1mA	1mA ~ 10mA	10mA ~ 20mA
5V / 10V50mA	5μA ~ 1mA	1mA ~ 25mA	25mA ~ 50mA

*Other models can be customized according to voltage and current requirements.

- Suitable for testing charging, discharging, and temperature performance of Coin Cells.
- Supports Cycle Life Testing, Constant Temperature Testing, Temperature Performance Testing, and Reliability Testing.
- Uses electrically insulated wooden trays, which can accommodate 16 Coin Cells.
- Connects to BTS communication protocol for temperature and process control settings.
- Complete equipment protection function with leak detection, short circuit, high temperature fuse, independent redundancy, and over-temperature protection.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

Mini Constant Temperature Test Chamber



Main Functions



Constant Temperature Test



Temperature Condition Test

Product Characteristics



Space Saving
< 0.5m²



Number of Channels
(Coin Cells)
16CH



Temperature Deviation
± 2.0℃
(No Load & Stable Temperature)



Temperature Fluctuation
≤ 1℃
(No Load & Stable Temperature)



Temperature Range
15℃ ~ 60℃
(No Load & Stable Temperature)



Test Security



Data Security



Works With
NEWARE LabTech



Model Number	MHW-25
Nominal Specification	25
Internal Size(mm)	280 × 250 × 360
Overall Size(mm)	360 × 450 × 500

*MHW-25 MHW: Constant temperature test chamber series 25: Nominal content area

- Suitable for temperature performance testing for various batteries, such as Coin Cells and Pouch Cells.
- Compact and novel appearance, occupying less than half a square meter of space.
- Unique temperature control system with PID algorithm.
- Holds a total of 16 Coin Cells.
- Wooden tray layer board for insulation.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

Constant Temperature Test Chamber



Main Functions


Constant Temperature Test


Temperature Condition Test

Product Characteristics


Forced Circulation Air Cooling


PID Fuzzy Algorithm


Number of Channels (Coin Cells)
160CH


Environment Temperature
5°C ~ 35°C


Temperature Range & Deviation
0°C ~ 60°C±2.0°C
(No Load & Stable Temperature)


Temperature Fluctuation
≤1°C
(No Load & Stable Temperature)


Heating Time
25°C ~ 60°C(≤30min)


Cooling Time
25°C ~ 0°C(≤50min)

Model Number	MHW-200
Nominal Specification	200
Internal Size(mm)	500 × 500 × 800
Overall Size(mm)	600 × 720 × 1500

*MHW-200 MHW: Constant temperature test chamber series 200: Nominal content area

- Suitable for temperature performance testing for various batteries, such as Coin Cells and Pouch Cells.
- Supports Constant Temperature Testing, Temperature Performance Testing, and Reliability Testing.
- Equipped with a fan, heater, evaporator, and contactless pulse-width modulation.
- Holds 40 snap-on batteries per layer, four layers available.
- Wooden tray layer board for insulation.
- Complete equipment protection functions.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

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High and Low Temperature Test Chamber

Main Functions

- Constant Temperature Test
- Temperature Condition Test
- Flameproof Function
- Automatic Fire Extinguishing Function



Product Characteristics

- Environment Temperature: 5°C ~ 35°C
- Temperature Range: -20/-40/-70°C ~ 150°C
- Temperature Deviation: $\pm 2.0^{\circ}\text{C}$ (No Load & Stable Temperature)
- Temperature Fluctuation: $\leq 1^{\circ}\text{C}$ (No Load & Stable Temperature)
- Heating Time: -20°C ~ 150°C ($\leq 60\text{min}$), -40°C ~ 150°C ($\leq 60\text{min}$), -70°C ~ 150°C ($\leq 75\text{min}$)
- Cooling Time: 20°C ~ -20°C ($\leq 45\text{min}$), 20°C ~ -40°C ($\leq 60\text{min}$), 20°C ~ -70°C ($\leq 75\text{min}$)

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MGDW High and Low Temperature Test Chamber Series (Single-layer box type)	Temperature rise/fall time	-20℃→150℃≤60min 20℃→-20℃≤45min	-40℃→150℃≤60min 20℃→-40℃≤60min		-70℃→150℃≤60min 20℃→-70℃≤75min	
	Capacity(L)	150	225	408	800	1000
	Internal Size(mm)	500×500×600	600×500 ×750	800×600 ×850	1000×800 ×1000	1000×1000 ×1000
	Overall Size (mm)	750×1300×1750	850×1300 ×1850	1050×1400 ×1950	1250×1600 ×2100	1250×1800 ×2100

*Customizable dry and moist heat type and multi-body structure

- Equipped with high-performance temperature control components and refrigeration systems.
- Optional configurations include humidity and explosion-proof functions.
- Complete equipment protection functions.
- The charge and discharge testing system and environmental test chamber can be controlled uniformly from a PC.

NEWARE

Explosion-Proof Test Chamber



Main Functions

- Flameproof Function
- Overcharge & Discharge Test

Product Characteristics

- Environment Temperature
5°C ~ 35°C
- Relative Humidity
≤85%RH
- Atmospheric Pressure
86kPa ~ 106kPa
- Test Security
- Multi-storey
- Fog Alarm



01



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04



MFB Series	Capacity(L)	220		350	500	600
	Storage Spaces	2	20	2		
	Inner Box Size (mm - single storage)	780×680×220	180×350×180	780×680×330	780×680×480	780×800×480
	Overall Size (mm)	950×980×1180	950×910×1600	950×980×1400	950×980×1700	950×1100×1700

*Customization available upon request

- Suitable for testing batteries of different specifications.
- Each storage unit can accommodate one battery pack.
- Equipped with safety devices such as smoke alarms, explosion-proof chains, and explosion-proof window.

NEWARE

Auto Calibration



Product Characteristics



24CH Detection Channel



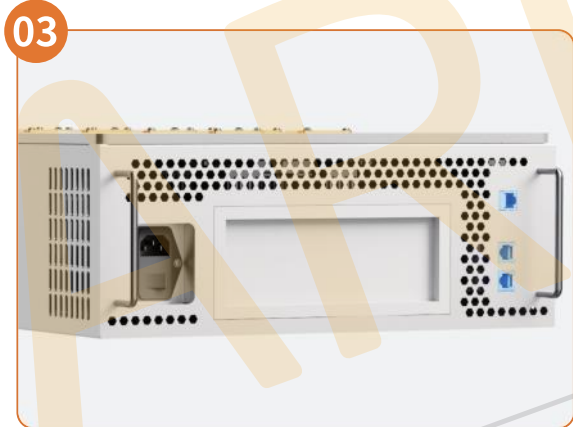
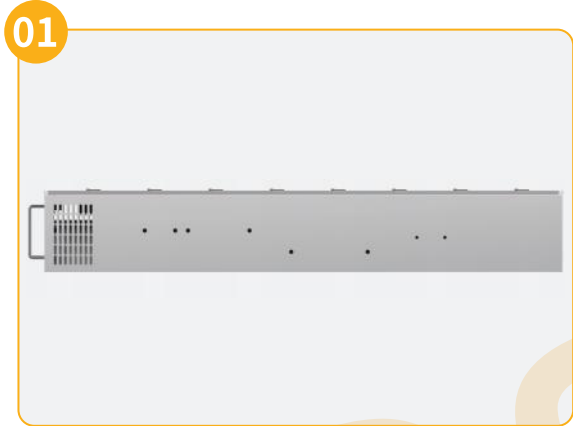
Calibration & Detection Time 240s



Test Security



Data Security



Calibration Voltage	0-10V
Segment	3
Measurement range	5V50mA, 5V6A, 5V12A, 5V60A, 5V120A
Calibration & Testing Time	240s
Operating Temperature	25°C ± 10°C
Communication Method	TCP/IP
Data Export Format	PDF, EXCEL, TXT

- Calibrates and tests 24-channel main equipment (customizable) at once.
- Integrates industrial control computer, DC power supply, electronic load, digital multimeter, switching circuit, fixture, and optional wireless communication.
- Can be automatically calibrated with the RGV and calibration software.

BT-9562 High Precision Battery Internal Resistance Instrument

Main Functions:



Impedance Measurement



Voltage Measurement



Reactance Measurement



Complex Impedance Measurement



Impedance Phase Angle Measurement



Product Characteristics

ACIR

ACIR Design



μΩ Resolution

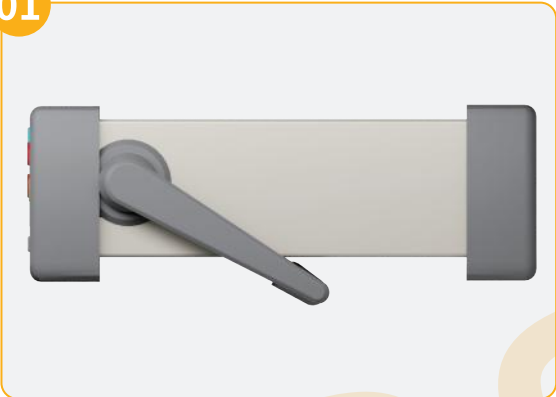


Test Security



Data Security

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04



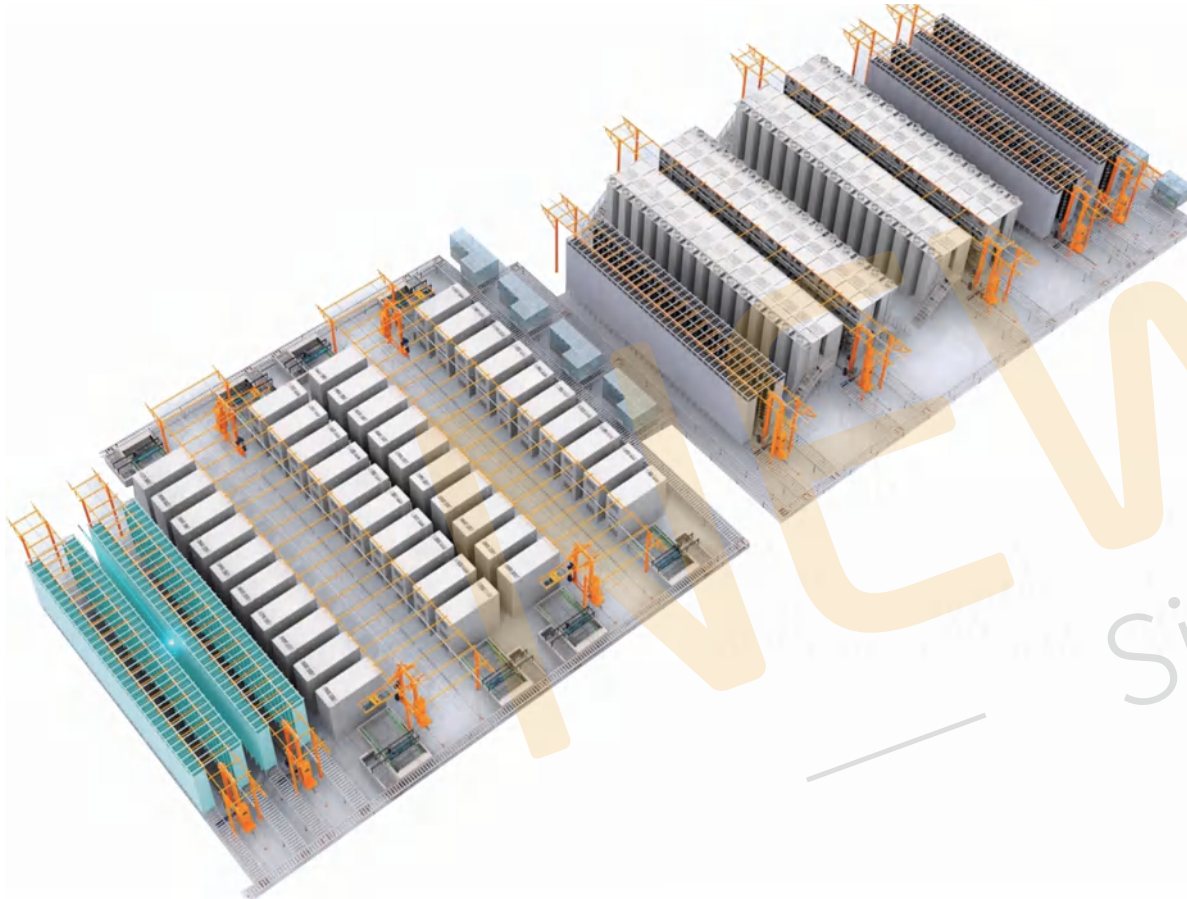
Impedance Measurement (0 ~ 3Ω)	Range	Display Range	Resolution	Current	Accuracy
	3mΩ	-3.3 ~ 3.3mΩ	0.1μΩ	250mA	± 0.4%
	30mΩ	-33 ~ 33mΩ	1μΩ	100mA	± 0.3%
	300mΩ	-330 ~ 330mΩ	10μΩ	10mA	± 0.3%
	3Ω	-3.3 ~ 3.3Ω	0.1mΩ	1mA	± 0.3%
Voltage Measurement (0 ~ 60V)	Range	Display Range	Resolution	Accuracy	
	6V	-6.6 ~ 6.6V	10μV	± 0.01%	
	60V	-66 ~ 66V	100μV	± 0.01%	

- Compatible with different battery types and capacities.
- Uses AC impedance for online testing with high reproducibility and wide testing range.
- Measures 5 types of data for comprehensive battery monitoring: internal resistance, voltage, reactance, complex impedance, and impedance phase angle.
- High-precision ADC and high-speed DAC for accurate measurements and less noise interference.
- Supports fast LAN communication and connection with NEWARE battery testing system.

Automatic Production Line

Battery Automation Production Solutions

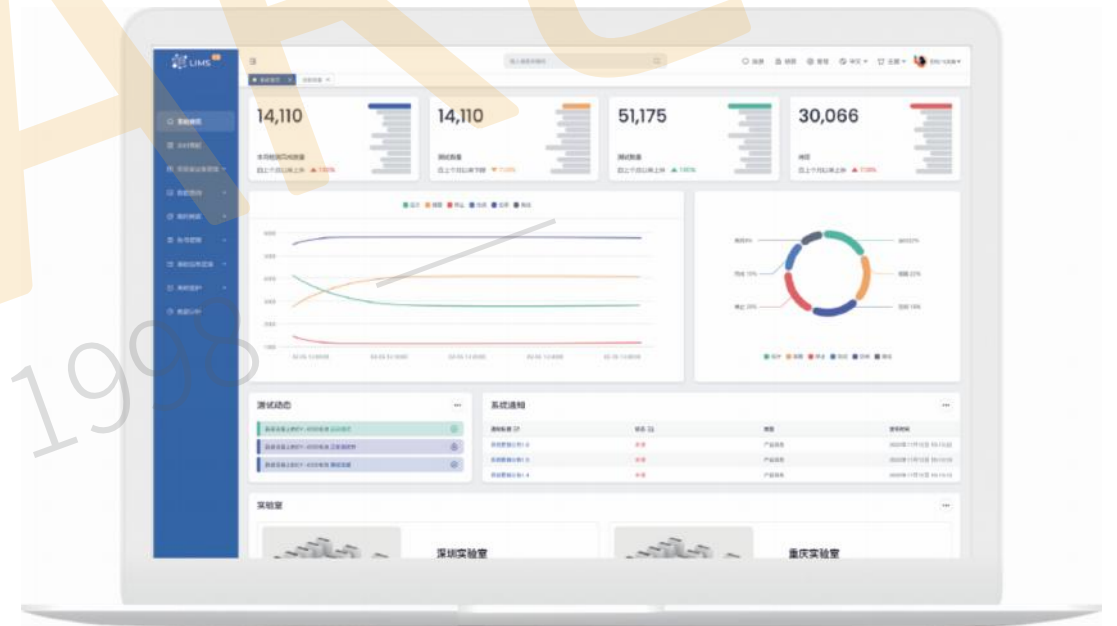
Link-Wide Services | Intelligent Algorithm | Real-Time Scheduling



LIMS for Lean Lab Management

Accelerating Battery Technology Change with Digital Technology

Connection | Management | Insight



NEWARE LabTech App

Smart-Lab Solutions Platform

Remote Intelligent Control | Technical Support | Asset Management
Academic Live Streaming | Selected Top Journals | Research Community



NEWARE Store App

One-Stop Purchasing Platform

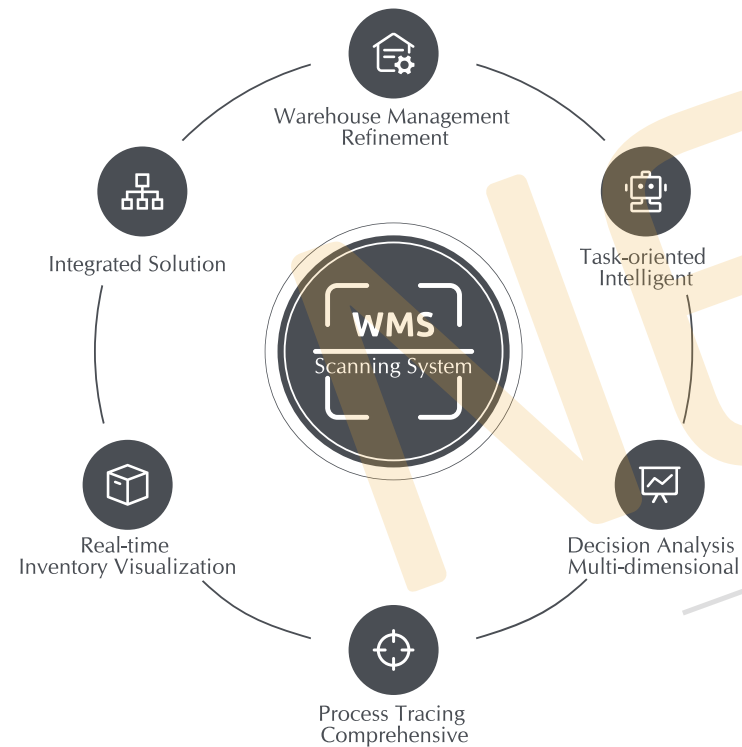
Complete Product Categories | One-Click Procurement | Video Explanation
Tool Guide | Academic Paper Award | Information Sharing



WMS Warehouse Management System

Creating Digital Intelligence Warehouse Management Platform for Enterprises

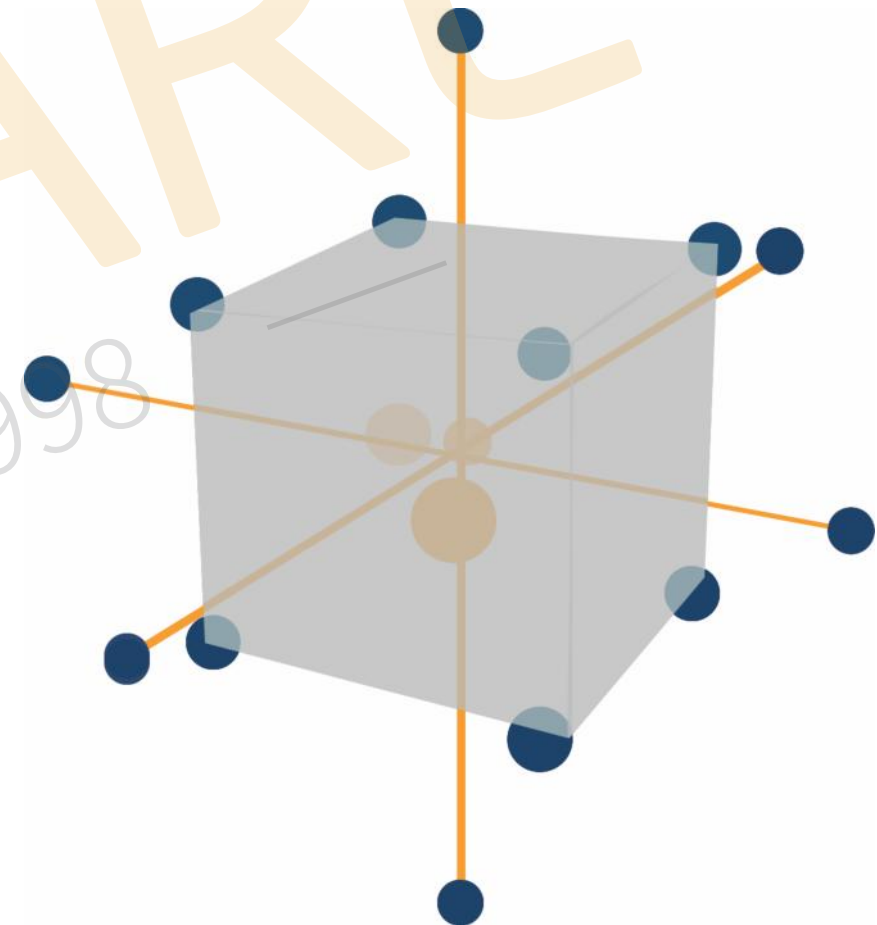
Supplier Collaboration | Procurement Receipt | Stock-In & Stock-Out |
Inventory Management | Cargo Management | Statistics | Product Management



Newell Test

Guaranteeing You a Accurate Test Data

Calibration Service | Data Collaboration | CNAS Certification



Battery Testing Solution



Coin Cell Solution



Pouch Cell Solution



Environmental Test Chamber Solution



Cylindrical Cell Solution

