

# PRODUCT CATALOG



# COLORIMETER





# **COLORIMETER BJH1P1**

#### COLORIMETER

High cost effective portable colorimeter

In response to the market demand for low price and high cost performance products, we have developed the economic colorimeter, which is a higher cost-effective model. With the advantages of high precision, high performance and low price, this model has been widely used in food, chemical industry, electronics, automobile, cosmetics, food and other fields.



High performance and low price.

Repeatability:  $\Delta E \leq 0.03$ .

Double locating: Illuminating locating and precise cross locating.

Equipped with rechargeable Li-ion batteries, no need to purchase batteries repeatedly.

4mm measuring aperture, portable structure, suitable for more measuring occasions.

White appearance, color box packaging, easy to transport.

Built-in white plate parameters, no need to do calibration.

Directly use after power on, no need to connect with the computer.

It is an economical and practical model, userfriendly interface design is easy to learn and operate. Illuminating and cross double locating functions make measu

# **SPECIFICATIONS**

Model	BJH1P1	
Illuminating/Viewing Geometry	D/8°	
Standard	CIE No.15, GB/T 3978	
Sensor	Silicon photodiode	
Measuring Aperture	4 mm	
Color Space	CIE LAB, Lch	
Observer	CIE 10°	
Illuminant	D65	
Display Data	Colorimetric Value; Color Difference Value Storage	
Temperature	Graph; PASS/FAIL Result; Color Offset	
Measuring Time	1.5 s	
Repeatability	ΔE*ab ≤ 0.03 (average of 30 measurements of standard white plate)	
Dimension	205 x 67 x 80 mm	
Errors between each instrument	ΔE*ab 0.4	
Weight	400 g	
Battery	Rechargeable lithium-ion battery 3.7 V @ 3200 mAh	
Lamp Life	5 years, >1.6 million measurements	
Screen	TFT 2.8 inch (16:9)	
Interface	USB	
Storage	100 Standards, 10000 Samples	
Operating Temperature	0-40 °C (32-104 °F)	
Storage Temperature	-20-50 °C (-4-122 °F)	
Optional Accessory	Miniature thermal printer, powder test box	
Alt Name	Colorimeter	

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High performance and low price.

Repeatability:  $\Delta E \leq 0.03$ .

Double locating: Illuminating locating and precise cross locating.

Equipped with rechargeable Li-ion batteries, no need to purchase batteries repeatedly.

4mm measuring aperture, portable structure, suitable for more measuring occasions.

White appearance, color box packaging, easy to transport.

Built-in white plate parameters, no need to do calibration.

Directly use after power on, no need to connect with the computer.

It is an economical and practical model, userfriendly interface design is easy to learn and operate. Illuminating and cross double locating functions make measurement more precise. Builtin white boards make measurement easier.

## **APPLICATIONS**

Colorimeters can easily achieve accurate color transmission, also can be used as a measuring equipment for precise color matching systems. It's widely used in traffic signs, plastics, electronics, painting, ink, textile and garment, printing and dyeing, printing paper and so on. With UV included, it can test fluorescent samples.



Traffic sign



Textile



Plastics



Coating



Food



Laboratory

# **COLORIMETER BJH1J1 TO BJH1J6**

#### COLORIMETER

A microcomputer colorimeter is suitable for color detection and control on various occasions. It is an ideal choice for color management in garment factories, chemical factories, printing factories, automobile factories, hardware processing factories, mold factories, paint factories, etc.



Light and cross dual positioning functions make the measurement easier; Using original new super optical path and dynamic integration time, which has higher measurement stability and measurement accuracy;

Ring light design, suitable for materials with polarized light (polarization); Equipped with high end CQCS3 color quality management software, which can be connected to computers.

Builtin white plate parameters. No need to calibrate each time which realizes rapid measurement.

Double Locating: Illuminating locating and precise cross locating. Switchable Double Measurement End Face: Large stable end face and small concave convex end face.

New Integrating Sphere Optical Path Design: Eliminating the stray light of the m

Model	BJH1J1	BJH1J2	BJH1J3
Old Model	BMET-809	BMET-805	BMET-807
Optical Geometry	45°/0°		8°/D
Standards compliant	CIE No.15, GB/T 3978		
Sensor	Silicon Photoelectric Diode Array		
Measuring Aperture	Φ8 mm flat	Φ20 mm	Φ4 mm
Color Space	CIE LAB, XYZ, LCh		CIE LAB, LCh

Observer	CIE 10° Standard observer		
Illuminant	D65		
Displayed Data	Chromaticity Values, Color Difference Values, Pass/Fail Result, Color Offset/Deviation Direction		
Measurement Time	1.5 s		
Repeatability	$\Delta$ E*ab within 0.08 (average value for 30 times) $\Delta$ E*ab 0.03		
Interinstrument agreement	ΔE*ab within 0.4 (a	average value for measuring BCRA	series II 12 pcs palettes)
Size (LxWxH)		205 x 67 x 80 mm	
Weight		About 400 g (including battery	()
Battery Performance	Rec	hargeable Li-ion Battery, 3.7 V @ 3	200 mAh
Lamp Life	5	years, more than 1.6 million measu	rements
Display		TFT Color 2.8 inch @ (16:9)	
Interface		USB	
Data Storage	Standard: 100	), Sample: 20000	Standard: 100, Sample: 10000
Operating Environment		0-40 °C (32-104 °F)	
Storage Environment		20-50 °C (-4-122 °F)	
PC Software	CQCS3 software	No software	CQCS3 software
Standard Accessories	Power adapter, manual, qu	nality management software (officia wristband	al website download), USB cable,
Optional Accessories	Micro Printer, Powder Test Box		
Alt Name	Colorimeter		
Model	BJH1J4	BJH1J5	BJH1J6
Old Model	BMET-806	BMET-804	BMET-810
Optical Geometry	8°/D		
Standards compliant	CIE No.15, GB/T 3978		
Sensor		Silicon Photoelectric Diode Arra	ay
Measuring Aperture	$\Phi$ 4 mm flat, $\Phi$ 4 mm sharp	$\Phi 8$ mm flat, $\Phi 4$ mm sharp	Φ4 mm sharp
Color Space	CIE LAB, LCh, XYZ	CIE LAB, LCh, XYZ, CIE RGB, CIE LL	JV CIE LAB
Observer	CIE 10° Standard observer		
Illuminant	D65	D65, A, C, D50, F2, F6, F7, F8, F1 F11, F12	D65
Displayed Data	Chromaticity Values, Color	Difference Values, Pass/Fail Result,	Color Offset/Deviation Direction
Measurement Time		1.5 s	
Repeatability	ΔE*ab 0.08 ΔE*ab 0.03 ΔE*ab 0.08		∆E*ab 0.08
Interinstrument agreement	ΔE*ab within 0.4 (average value for measuring BCRA series II 12 pcs palettes)		
Size (LxWxH)	205 x 67 x 80 mm		
Weight	About 400g(including battery) 500 g		
Battery Performance	Rechargeable Li-ion Battery, 3.7 V @ 3200 mAh		
Lamp Life	5 years, more than 1.6 million measurements		
Display	TFT Color 2.8 inch @ (16:9)		
Interface	USB		
Data Storage	Standard: 100, Sample: 20000 Standard: 100, Sample: 10000		
Operating Environment	0-40 °C (32-104 °F)		
Storage Environment	20-50 °C (-4-122 °F)		
PC Software	cóc	CQCS3 software /	
Standard Accessories	Power adapter, manual, quality management software (official website download), USB cable, wristband		
Optional Accessories	Micro Printer, Powder Test Box		

Alt Name Colorimeter







## **FEATURES**

Light and cross dual positioning functions make the measurement easier;

Using original new super optical path and dynamic integration time, which has higher measurement stability and measurement accuracy;

Ring light design, suitable for materials with polarized light (polarization);

Equipped with high end CQCS3 color quality management software, which can be connected to computers.

Builtin white plate parameters. No need to calibrate each time which realizes rapid measurement.

Double Locating: Illuminating locating and precise cross locating.

Switchable Double Measurement End Face: Large stable end face and small concave convex end face.

New Integrating Sphere Optical Path Design: Eliminating the stray light of the main optical path and auxiliary optical path.

Possessing the highest measurement stability and precision.

4mm Measuring Aperture.

Equipped with rechargeable high capacity Liion batteries. No need to purchase batteries repeatedly.

Configure CQCS3 software. Connect PC computers to realize more functions.

Handhead structure: small and convenient; make the measurement easier.

Exquisite appearance: adopts traditional and fashionable aesthetic designs.

Spending huge sums on high end mold. Product consistency approaches 100%.

High cost performance: large output, good quality, cheap products.



## **APPLICATIONS**



**Plastics** 



Printing



Automobile



Textile



Medicine



**Paints** 

# **COLORIMETER BFU1U1**

PORTABLE COLORIMETER



- 1. 3 inch color screen with friendly GUI.
- 2. The unique high-precision filter system makes the instrument more stable and accurate.
- 3. Direct reading of concentration, automatic power-off.
- 4. With built-in standard curves. Users can set up curves according to different measurement requirements.
- 5. Support up to 7-point calibration. Support calibration restoring function to restore factory calibration data.
- 6. With a large-capacity storage function, can store 5000 sets of test data.
- 7. A rechargeable battery can last for 10 hours. Auto power-off time can be set.

Model	BFU1U1
Measurement Method	Platinum-Cobalt Colorimetry
Measuring Range	20-500 PCU
Abs Range	-0.3~3A

Colorimetric Method	Tube Colorimetric	
Accuracy	±5%	
Resolution	0.01 PCU	
Light Source	Imported Silicon Photodiode	
Display	3-inch color screen	
Output	Micro USB	
Power	Power adapter/Rechargeable lithium battery	
Waterproof Level	IP54	
Ambient Temperature	(5-40) °C	
Ambient Humidity	Relative humidity ≤ 85% (No condensation)	
Dimensions/N.W.	100x210x70 mm/1kg	
Shipping size/G.W.	355x265x150mm/2kg	
Standard Accessaries	Sample bottle x 5 pcs, Power adapter(Charger), Manual	
Alt Name	Portable Colorimeter	

# **COLORIMETER BJH111 BJH112 BJH113**

#### COLORIMETER

A portable computer colorimeter adopts the core multichannel color sensor of an international imported brand, more stable IC platform and efficient and accurate algorithm to provide users with accurate and fast color management and application.



Humanized design and simplicity of operation, automatic black and white calibration function when power on;

Stable measurement performance The average fluctuation of  $\Delta E$  is less than 0.06; Flexible and accurate framing and positioning function;

PCside software realizes more function expansion, which can perform color difference analysis, color difference accumulation analysis, chromaticity index, color sample library management, simulated object color, etc.

Stable Measurement Performance:

The average fluctuation of  $\Delta E$  is less than 0.07, actually more in 0.03~0.06. Portable structure design which is more conductive to keeping the instrument stable when using.

Convenient and Fast Locating:

Model	BJH1I1 BJH1I2 BJH		BJH1I3
Old Model	BMET-803	BMET-802	BMET-801
Color space	CIE L*a*b*; CIE XYZ; CIE RGB; CIE L*u*v*; WI(Whiteness); YI (Yellowness); Color Fastness; Staining fastness	CIE L*a*b*; CIE XYZ	CIE L*a*b*; CIE XYZ; CIE L*C*h*
Color Difference Formula	$\Delta$ E*ab; $\Delta$ E(h); $\Delta$ E*uv; $\Delta$ E*94; $\Delta$ E*cmc(2:1); $\Delta$ E*ab; $\Delta$ E (h); $\Delta$ E*uv; $\Delta$ E*94; $\Delta$ E*cmc(2:1); $\Delta$ E $\Delta$ E*00		
Optical Geometry	CIE Recommended way: 8°/d		
Sensor	Silicon Photoelectric Diode Array		
Correction function	Auto Calibration at Starting		
Calibration	Automatic/Manual Manual		Manual
Illuminant	D65 / D50 / A D65		D65
Data Storage	Chinese/English interface; 100 standard samples; 20,000 trialproduced samples		
Measurement mode	SCI (Specular reflection) & SCE (Nonspecular reflection)		
Aperture	8mm/4mm 8mm		8mm

Locate Mode	Illumination Location / Camera Location	Illumination Location	
Observer	CIE 10° standard observer		
Displayed Data	Chromaticity Values; Color Difference Value	es; Pass/Fail Result; Color Offset/Deviation Direction	
Light wave range		L: 0-100	
Repeatability	ΔE < 0.06 (Average of 30 tin	nes measurement of the white board)	
Measurement Time	1.5 s		
Battery Performance	Able to do 3000 times of measurements within 8 hours		
Lamp Life	5 years; more than 1.6 million measurements		
Display	TFT colour 2.8 inch (16:9); Resolving power 400x240		
Interface	USB		
Humidity range	0-85% (No Condensation)		
Weight	About 400 g (includes 3200 mAh battery weight)		
Size (LxWxH)	205 x 70 x 100 mm		
Alt Name	Colorimeter		









Humanized design and simplicity of operation, automatic black and white calibration function when power on;

Stable measurement performance The average fluctuation of  $\Delta E$  is less than 0.06;

Flexible and accurate framing and positioning function;

PCside software realizes more function expansion, which can perform color difference analysis, color difference accumulation analysis, chromaticity index, color sample library management, simulated object color, etc.



Stable Measurement Performance:

The average fluctuation of  $\Delta E$  is less than 0.07, actually more in 0.03~0.06.

Portable structure design which is more conductive to keeping the instrument stable when using.



Convenient and Fast Locating:

Illumination locating is a fast, simple and convenient locating function which is the original function.



PC Software-Realize More Function Expansion:

It has the intellectual property of PC software. The corresponding software serial number and password protection is configured in colorimeter.

Be able to perform color difference analysis, color difference cumulative analysis, chromaticity index, color sample database management, simulating object color, etc.



Advanced Power Management Design:

It is the first enterprise using a high capacity Liion battery in a colorimeter.

Liion batteries can be repeatedly charged which will save cost. Meanwhile, it can measure more than 3000 times on one charge to ensure the stability of long time measurement.

# **APPLICATIONS**



Fabric Dyeing



Plastic



Printing



## Ink & paint



Ceramics

# **COLORIMETER BFU1V1**

## COLORIMETER



- 7 inch high-resolution touch screen with friendly GUI.
  The unique high-precision filter system makes the instrument more stable and accurate.
- 3. Direct reading of concentration.
- 4. With built-in standard curves. Users can set up curves according to different measurement requirements.
- 5. Support up to 7-point calibration. Support calibration restoring function to restore factory calibration data.
- 7. With a large-capacity storage function, can store 5000 sets of test data.
- 8. Built-in thermal printers can print current data and stored data.

Model	BFU1V1	
Measurement Method	Platinum-Cobalt Colorimetry	
Measuring Range	0-500PCU	
Abs Range	-0.3~3A	
Colorimetric Method	Tube Colorimetric	
Accuracy	≤5%	
Resolution	0.01 PCU	
Light Source	Imported Silicon Photodiode	
Display	7-inch high-resolution 1024 * 600 touch screen	
Output	USB (for data transfer)	
Power	AC 220V/50Hz or AC 110V/60Hz	
Ambient Temperature	(5-40) ℃	
Ambient Humidity	Relative humidity ≤ 85% (No condensation)	
Dimensions/N.W.	460x380x200 mm/8kg	
Shipping size/G.W.	520x450x300mm/10kg	
Standard Accessaries	10mm glass cuvette x 4 pcs, 30mm glass cuvette x 2 pcs, Power cord, Manual	
Alt Name	Colorimeter	

# **COLORIMETER BHJ1E1**

#### DIFFERENTIAL SCANNING CALORIMETER

DSC is designed to determine the inner heat transition relating to temperature and heat flow, It has a wide range of applications, especially in material research and development, performance testing and quality control. Material characteristics: such as glass transition temperature, cold crystallization, phase transition, melting, crystallization, thermal stability, oxidation induction period, oxidation induction temperature, specific heat capacity, curing / crosslinking are all areas of DSC research and development.



- 1. New designed oven structure ensures high resolution and good stability of base line:
- 2. Air flow meter may control the air flow rate accurately; the test data can be recorded into the database directly;
- 3. The instrument is bilateral control, may be controlled by both main frame and software. User-friendly interface, easy operation.
- 4. Using Cortex-M3 kernel ARM controller, faster processing speed, more temperature control.
- 5. USB two-way communication, more convenient operation.
- 6. Adopt a 7 inch 24bit full-color LCD touch screen, more friendly interface.
- 7. Using a professional alloy sensor, more corrosion resistance, oxidation resistance.

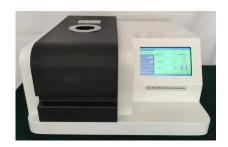
Model	BHJ1E1
Old Model	BDSC-109
DSC range	0 ~ ±600 mW
Temperature range	Room temperature ~ 600°C
Heating rate	0.1 ~ 100°C/min
Temperature resolution	0.01°C
Temperature fluctuations	±0.01°C
Temperature repeatability	±0.1°C
DSC noise	0.01 μW
DSC resolution	0.01 μW
DSC accuracy	0.01 mW
DSC sensitivity	0.001 mW
Control mode	Rising temperature, constant temperature (full automatic programmed control)
Curve scanning	Rising scan, Cooling scan
Atmosphere control	Automatic switching
Display	24-bit, 7-inch LCD touch screen display
Data interface	Standard USB connector
Parameter standard	Equipped with standard material, with key calibration function - user can correct temperature and heat enthalpy
Alt Name	Differential scanning calorimeter

# **COLORIMETER BHJ1B1**

#### DIFFERENTIAL SCANNING CALORIMETER

DSC is the company's highest precision differential. The sensor is made of imported e-couple with high sensitivity. Signal acquisition circuit shielding protection, strong anti-interference, high baseline stability.

The DSC is a touch screen type, which can be used for glass transition temperature test, phase transition test, melting and enthalpy test, product stability and oxidation induction period test. Wide range of application.



- 1.Industrial level 7-inch touch screen, display information rich.
- 2. New metal furnace structure, better baseline and higher precision.Indirect conduction mode is adopted in heating, which has high uniformity and stability, and reduces pulse radiation, which is better than traditional heating mode.
- 3. USB communication interface, strong versatility, reliable communication, support self

recovery connection function.

- 4. Automatic switching of two-way atmosphere flow, fast switching speed and short stable time. At the same time, a protective gas input is added.
- 5. The software is simple and easy to operate.

Furnace structure

Melting point, heat enthalpy, phase change temperature analysis:

## **SPECIFICATIONS**

Model	BH 1B1
Old Model	BDSC-106
Temperature range	Room temperature ~ 600°C, air cooling
Temperature resolution	0.01°C
Temperature fluctuation	±0.01°C
Temperature repeatability	±0.1°C
Heating rate	0.1~100°C/min
Constant temperature time	Program setting ≤ 24h
Temperature control mode	Heating, constant temperature, cooling (full automatic program control)
DSC range	0 ~ ±600mW
DSC resolution	0.01uW
DSC accuracy	0.001mW
Working power supply	AC220V 50Hz or customized
Atmosphere control gas	Nitrogen, oxygen (instrument automatic switch)
Gas flow	0~300mL/min
Gas pressure	0.3MPa
Display mode	24 bit color, 7 inch LCD touch screen display
Data interface	Standard USB interface
Parameter standard	With reference materials (indium, tin), users can adjust the temperature by themselves
Upper computer	Three-in-one operation software (also suitable for thermogravimetry and synchronous instruments)
Thermocouples	Several groups: one for sample, one for furnace body, and one for internal environment temperature
Alt Name	Differential scanning calorimeter

## **FEATURES**

- 1.Industrial level 7-inch touch screen, display information rich.
- 2. New metal furnace structure, better baseline and higher precision. Indirect conduction mode is adopted in heating, which has high uniformity and stability, and reduces pulse radiation, which is better than traditional heating mode.
- 3. USB communication interface, strong versatility, reliable communication, support self

recovery connection function.

- 4. Automatic switching of two-way atmosphere flow, fast switching speed and short stable time. At the same time, a protective gas input is added.
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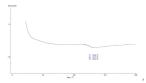


Furnace structure

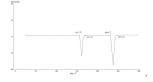
Melting point, heat enthalpy, phase change temperature analysis:



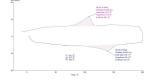
## Glass analysis:



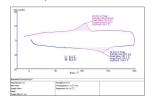
Initial melting point, final melting point analysis:



Analysis of two or more section lifting temperatures:



## Test report:



#### Accessory:



# **COLORIMETER BHJ1F1**

#### DIFFERENTIAL SCANNING CALORIMETER

This model is one of the most accurate DSC series products launched by the company. The sensor is made of imported material E-pair, which has high accuracy, high sensitivity and good repeatability. The signal acquisition circuit has shielding protection, strong anti-interference, and extremely high baseline stability and repeatability.

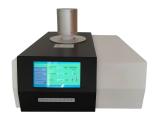
It can be used to test glass transition temperature, phase transition temperature, melting point, enthalpy value, curing temperature, product stability, oxidation induction period, etc. It is competent in the research of pipes, polymers, chemicals, food, medical treatment and many other fields, and its products serve universities, enterprises, third-party measurement and quality inspection units, with a wide range of applications to meet the testing needs of various industries.



- 1. 7-inch touch screen with rich display information.
- 2.New furnace structure, better baseline and higher precision. Heating by indirect conduction, high uniformity and stability, reduced pulse radiation, better than traditional heating mode.
- 3.USB communication interface, with strong universality, reliable communication without interruption, and support for self recovery connection function.
- 4. Automatic switching of two atmospheric flows, fast switching speed and short stabilization time. At the same time increase one way protective gas input.
- 5. The software is simple and easy to operate.
- 6.Ultra high sensitivity, accuracy, 0.001 mw, 0.001 °C.
- 7.Excellent technical indicators, Superior performance, High cost performance, Widely used.

Model	BHJ1F1	
Old Model	BDSC-110	
Temperature range	Room temperature ~ 1100°C	
Temperature resolution	0.001°C	
Temperature fluctuation	±0.001°C	
Temperature repeatability	±0.01°C	
Heating rate	0.1 ~ 100°C/min	
Constant temperature time	Program setting	
Temperature control mode	Heating up, constant temperature, cooling down (Full automatic program control)	
DSC range	0 ~ ±600 mW	
DSC resolution	0.01 μW	
DSC sensitivity	0.001 mW	
Working power supply	AC 220V / 50 Hz or customized	
Atmosphere control gas	Nitrogen, oxygen (Program setting / automatic switching)	
Gas flow	0 ~ 200 mL/min	
Gas pressure	0.2 MPa	
Display mode	24-bit color, 7-inch LCD touch screen display	
Data interface	Standard USB interface	
Parameter standard	With reference materials (indium, tin); user can adjust temperature manually	
Thermocouple configuration	Multiple thermocouples: sample, furnace, and internal ambient temperature measurement	

#### Differential scanning calorimeter







## **FEATURES**

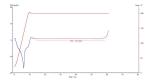
- 1. 7-inch touch screen with rich display information.
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#### Furnace structure

Map analysis of some test cases

1.0xidation period test of PE, PPR and other pipes:

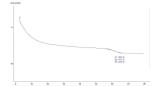
The oxidation induction time (OIT) was measured by DSC (differential scanning calorimeter). The sample is usually heated to the specified temperature and constant temperature under nitrogen atmosphere, and then switched to oxygen atmosphere. After a period of time, the material begins to oxidize and release heat. The released heat is detected by the sensor, and the induced oxidation time (OIT) is obtained through software analysis. The length of the oxidation induction time is a parameter of the oxidation decomposition resistance of the reaction material, which is still very meaningful. Usually, the parameter must be detected for buried plastic pipes.



#### 2. Glass transition test of resin and other materials:

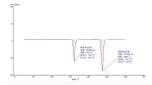
For amorphous polymers, when the polymer changes from a high elastic state to a glass state through cooling, or from a glass state to a high elastic state through heating, the process is called the glass transition, and the temperature at which the glass transition occurs is called the glass transition temperature. For crystalline polymers, the glass transition refers to the transition of the amorphous part from the high elastic state to the glass state (or the glass state to the high elastic state). Therefore, glass transition is a common phenomenon in polymers. However, the

glass transition phenomenon is not limited to polymers, and some small molecular compounds also have glass transition.



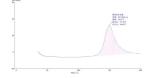
## 3. Material melting point and enthalpy test (thermal stability test):

The melting point is the temperature at which a solid changes its state of matter from solid to liquid, and the peaks of multi-component mixtures are also multi-peaks; The measurement of enthalpy value is also applicable to the measurement and analysis of crystallinity.



#### 4. Curing test of glue and other materials:

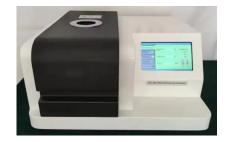
Refers to the process of material from low molecular weight to high molecular weight, and the strength of solidified sample will be higher;



# **COLORIMETER BHJ1C1**

#### DIFFERENTIAL SCANNING CALORIMETER

The DSC is a touch screen type, which can be used for glass transition temperature test, phase transition test, melting and enthalpy test, product stability and oxidation induction period test. Wide range of application.



- 1. Industrial grade 7-inch touch screen with rich display information.
- 2. New metal furnace structure, better baseline and higher accuracy. Indirect conduction

mode is adopted for heating, which has high uniformity and stability, reduces pulse radiation, and is superior to the traditional heating mode.

- 3. USB communication interface has strong universality, reliable and uninterrupted communication, and supports self recovery connection function.
- 4. Automatic switching of two-way atmosphere flow, fast switching speed and short stability time. At the same time, one protective gas input is added.
- 5. The software is simple and easy to operate.

Furnace structure

Melting point, heat enthalpy, phase change temperature analysis:

Model	BHJ1C1
Temperature range	-40°C ~ 600°C
Temperature resolution	0.01℃
Temperature fluctuation	±0.01°C
Temperature repeatability	±0.1°C
Heating rate	0.1 ~ 100°C/min
Cooling rate	0.1 ~ 20°C/min
Constant temperature time	Program setting ≤ 24h
Curve scanning	Heating scan, Cooling scan
DSC range	0 ~ ±800 mW
DSC resolution	0.01 μW
DSC accuracy	0.001 mW
Temperature control mode	Heating, constant temperature, and cooling
Working power supply	AC 220V 50Hz or customized
Atmosphere control gas	Nitrogen, oxygen (instrument automatic switch)
Gas flow	0 ~ 300 mL/min
Gas pressure	0.3 MPa

Display mode	24-bit color, 7-inch LCD touch screen display	
Data interface	Standard USB interface	
Parameter standard	Equipped with reference materials (indium, tin, lead) - user can correct temperature manually	
Thermocouple configuration	Multiple thermocouples: one for sample temperature, one for instrument internal ambient temperature	
Alt Name	Differential scanning calorimeter	

- 1. Industrial grade 7-inch touch screen with rich display information.
- 2. New metal furnace structure, better baseline and higher accuracy. Indirect conduction mode is adopted for heating, which has high uniformity and stability, reduces pulse radiation, and is superior to the traditional heating mode.
- 3. USB communication interface has strong universality, reliable and uninterrupted communication, and supports self recovery connection function.
- 4. Automatic switching of two-way atmosphere flow, fast switching speed and short stability time. At the same time, one protective gas input is added.
- 5. The software is simple and easy to operate.

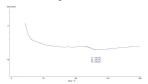


Furnace structure

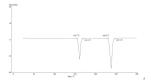
Melting point, heat enthalpy, phase change temperature analysis:



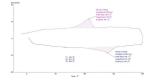
Glass analysis:



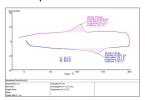
Initial melting point, final melting point analysis:



Analysis of two or more section lifting temperatures:



#### Test report:



# **COLORIMETER BHJ1D1**

#### DIFFERENTIAL SCANNING CALORIMETER

The DSC is a touch screen type, which can be used for glass transition temperature test, phase transition test, melting and enthalpy test, product stability and oxidation induction period test. Wide range of application.



- 1.Industrial level 7-inch touch screen, display information rich.
- 2. New furnace body structure, can be matched with a variety of refrigeration devices
- 3. USB communication interface, strong versatility, reliable communication, support self recovery connection function.
- 4. Automatic switching of two-way atmosphere flow, fast switching speed and short stable time. At the same time, a protective gas input is added.
- 5. The software is simple and easy to operate.

Furnace structure

 $\label{thm:meaning} \mbox{Melting point, heat enthalpy, phase change temperature analysis:} \\$ 

Glass analysis:

Initial melting point, final melting point analysis:

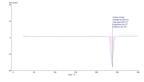
Model	BHJ1D1
Old Model	BDSC-108
Temperature range	-150°C ~ 600°C
Temperature resolution	0.01°C
Temperature fluctuation	±0.01°C
Temperature repeatability	±0.1°C
Heating rate	0.1 ~ 80°C/min
Constant temperature time	0 ~ 400
Temperature control mode	Heating, constant temperature, cooling
DSC range	0 ~ ±600 mW
DSC resolution	0.001 mW
DSC accuracy	0.001 mW
Working power supply	AC 220V 50Hz or customized
Cooling equipment	Liquid nitrogen cooling
Atmosphere control gas	Nitrogen, oxygen (instrument automatic switch)
Gas flow	0 ~ 300 mL/min
Gas pressure	0.2 MPa
Display mode	24-bit color, 7-inch LCD touch screen display
Data interface	Standard USB interface
Parameter standard	With reference materials (indium, tin); users can adjust temperature manually
Upper computer software and thermocouple configuration	Software automatically adjusts coordinate range; analysis results can be dragged freely; includes multiple thermocouples for sample, furnace, and internal temperature

- 1.Industrial level 7-inch touch screen, display information rich.
- 2. New furnace body structure, can be matched with a variety of refrigeration devices
- 3. USB communication interface, strong versatility, reliable communication, support self recovery connection function.
- 4. Automatic switching of two-way atmosphere flow, fast switching speed and short stable time. At the same time, a protective gas input is added.
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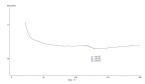


Furnace structure

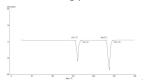
Melting point, heat enthalpy, phase change temperature analysis:



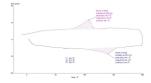
Glass analysis:



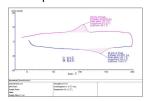
Initial melting point, final melting point analysis:



Analysis of two or more section lifting temperatures:



#### Test report:



Accessory:





# Biolab Scientific Ltd.