

----Petrochemical & Energy





We provide instruments for the detection of oil related characteristics, you can test oil pour point, freezing point, cloud point, flash point, cold filter point, viscosity, distillation range, freezing point, spontaneous combustion point, moisture, density, pH, particle pollutants ,etc.

About us

Innova Bio-Meditech is one of the professional solution provider of laboratory and medical devices. Firmly committed to our mission of "sharing innovative bio-meditech solutions with the world", we are dedicated to innovation in the fields of Biology Project, Life Science, Pharmacy Industry and Medical Treatment.

Innova Bio-Meditech possesses a sound distribution and service network with business partners in North and Latin America, Europe, Africa and Asia-Pacific etc. We have built up a well established R&D, manufacture network with 3 centers in Qingdao, Shanghai and Suzhou. Inspired by the needs of our customers, we adopt advanced technologies and transform them into accessible innovation. This means constant effort and research, in order to more fully understand the developments of the market, INNOVA produce constantly upgraded product ranges by adding new products year after year.

The passion for science

ITP426 Pour Point Tester conforms to ASTMD2386 and ASTMD97, which is suitable for determining the freezing point and pour point of petroleum products.

- [©] The compressor refrigeration system ensures that the required refrigeration depth is reached.
- [©] Built-in powerful cooling fan, no need to circulate water, easy to operate.
- Automatically control the temperature difference between the cooling medium and the tested sample to ensure a controlled, uniform and stable cooling rate.
- Internal precision microcomputer timing to ensure the accuracy of judgment results.

Temperature range	-70~50°C
Resolution	0.1 °C
Refrigeration method	Compressor refrigeration (France DANFOS)
Working cold tank	Single tank two bath, two bath isothermal
Timing	60.0s indexing 0.1s
Temperature measuring element	PT100(German JUMO company temperature sensor)
Relative humidity	≤85RH(non-condensing)
Ambient temperature	5 °C to 40 °C
Supply voltage AC	220V±10% 50Hz±10%
Power consumption	≤900W
Overall dimensions	600mm × 450mm × 450mm
The weight of the instrument	50kg



IPP1121 Auto Pour Point Tester is suitable for the determination of the melting point pour point of lubricating oil and dark petroleum products, and there is no limit to the viscosity. It can be used in power, petroleum, chemical, commodity inspection and scientific research departments. Conforms to ASTMD2386,ASTMD97.



- $^{\circ}$ Can be heated to 50 $^{\circ}$ C also be cooled to -70 $^{\circ}$ C.
- Automatic detection, automatic printing results, good repeatability.
- Automatic tilt during detection, fully in line with the standard.
- High performance compressor refrigeration, long service life.
- © Test method is optional, can be fast detection or normal detection.
- O According to customer requirements to write cooling speed and testing standa



Temperature range	-70~50°C	
Resolution	0.1 °C	
Refrigeration method	Compressor refrigeration (France DANFOS)	
Working cold tank	Single tank two bath, two bath isothermal	
Timing	60.0s indexing 0.1s	
Temperature measuring element	PT100(German JUMO company temperature sensor)	
Relative humidity	≤85RH(non-condensing)	
Ambient temperature	5 °C to 40 °C	
Supply voltage AC	220V±10% 50Hz±10%	
Power consumption	≤900W	
Overall dimensions	600mm × 450mm × 450mm	
The weight of the instrument	50kg	



The ICP2180 Cloud Point Tester adopts modern high-tech micro-electronic control technology, and adopts MCS-51 series single chip microcomputer as the system control core.Applicable standards :ASTM D2500



- Man-machine menu-type dialogue, wizard operation, cloud point measurement process is all automated.
- Advanced design, reasonable structure, simple operation, safe and reliable.





Applicable cil	Light cill with turbidity aciet in the range of 10° (Γ°)	
Applicable oil	Light oil with turbidity point in the range of 10°C ~ -65°C	
Measurement repeatability	2°C	
Display resolution	0.1 °C	
Accuracy	0.3%	
Refrigeration limit depth	below -70°C (double compressor cascade refrigeration)	
Cooling speed	Turbidity point: 45ml each time	
The number of test samples	1	
Cold bath	1 hole (metal aluminum bath)	
Rated power	800W	
Ambient temperature	5°C~40°C	
Supply voltage	AC ≤85%220v±10% 50Hz±10%	
Relative humidity	≤85%	
Overall dimensions	400mm x 790mm x 490mm	
The weight of the instrument	50Kg	



IPMFP611 automatic closed flash point tester is a new generation of fully automated instrument designed and manufactured according to ASTM D93 standards. Used in power, petroleum, chemical, commodity inspection and scientific research departments; Apply to oil products that need to determine the flash point characteristics of petroleum products; It is suitable for the test of closed flash point temperature and danger level of oil products.

 Automatic lifting, temperature control, ignition, detection, printing, cooling, etc.

- Heating rate and stirring rate can be adapted to various standards
- Atmospheric pressure calibration function.
- Automatically stop heating when the temperature exceeds the value.
- ◎ Instrument fault self-diagnosis function.
- Unique ignition design, users can switch to gas flame according to requirements.
- Scanning or electronic flame scanning mode.



Temperature range	40~370°C
Resolution	0.1 °C
Accuracy	Flash point value < 110 °C, \pm 1 °C Flash point value ≥ 110 °C, \pm 2 °C
Repeatability	≤4°C
Reproducibility	≤8È
Ignition mode	Electronic ignition, gas flame
Cooling mode	Built-in strong air cooling
Relative humidity	≤85RH(non-condensing)
Ambient temperature	10~40 °C
Supply voltage AC	220v±10% 50Hz±10%
Power consumption	≤500W
Overall dimensions	350 mm x 310mm x 300mm
The weight of the instrument	13.5Kg





IAFP170 automatic ABEL closed flash point tester sets the test mode strictly in accordance with different test standards. It has the advantages of multiple test items and high degree of automation, and can be widely used in chemical safety property inspection, petrochemical inspection, plastics and other industries. Applicable to ISO 13736, IP170, ISO 1516, ISO 1523.

//

- The experimental mode selection, in strict accordance with different Abel closed cup (Abel closed cup) standard operating procedures for flash point detection test, detected sample flash point value:
 - $(1) \mathsf{ISO13736}, \mathsf{ISO1516}, \mathsf{ISO1523}$ and other test mode selection.
 - (2)Expected flash point search mode: Perform a quick test on the sample that does not know the expected flash point value, and retrieve the expected flash point.
 - (3)User-defined, test parameters can be set according to different test requirements, convenient for users to research and development and simulation test operation. (Different standards of temperature control and ignition detection mode requirements are different, users can set the test mode).
- Suse Japan Mitsubishi original imported PLC programmable control unit, to achieve industrial precision standards. Large built-in storage capacity, convenient for future software upgrade and replacement. Reduce maintenance costs without additional software replacement costs.
- The main parts of the instrument (PT100 temperature sensor, CRC thermocouple detector, ring heating wire, liquid crystal display, stirring motor, etc.) are imported from original brands to ensure the operating performance of the instrument to improve the loss of life.
- Itigh degree of automation: according to the operation mode on the LCD screen set the flash point test parameters, press the START key, the whole test process is automatically carried out. The screen directly displays the test temperature, curve, atmospheric pressure, detection times, heating rate and other data information.
- The instrument can be extended to connect the independent test unit, and can be tested at the same time. A single instrument can be extended to simultaneously test the same or different open or closed flash points. (XF-2S/XF-4S multi-cup flash point) The main electrical parts of the control part and the measurement part are imported parts to ensure the reliability and stability of the instrument.
- ◎ Self-fault diagnosis and alarm function.
- © Equipped with a standard needle printer, which can list the test results one by one.

Model number	XF-170A	XF-170B	
Temperature range	10~100°C (room temperature at 28°C)	0~110 [°] C (cooling medium is about 40 [°] C)	
Refrigeration mode	Air-cooled type	Liquid cooled type	
Temperature control accuracy	±0.1 °C	±0.1 °C	
Refrigeration source	Imported semiconductor cooling metal	Imported semiconductor cooling metal bath cold trap	
Mixing method	0-30rpm	0-30rpm	
Temperature sensor	PT100 thermocouple sensor	PT100 thermocouple sensor	
Flash point detection sensor	CRC detects thermocouples	CRC detects thermocouples	
Ignition mode	Gas ignition	Gas ignition	
Supply voltage	AC 220v±10% 50Hz±10%	AC 220v±10% 50Hz±10%	
Power consumption	800W	800W	
Overall dimension	400mm×380mm×350 mm	400mm×380mm×350 mm	
Weight	20kg		





IAB1041 Acid and base value tester adopts the principle of potentiometric titration, records the electrode potential and titration volume in the titration process, finds out the equivalent point and the corresponding volume of the standard titration solution, so as to calculate the acid value of the sample. The instrument can accurately detect the acid value of transformer oil, turbine oil, anti-fuel oil, diesel oil, gasoline and other petroleum products. Used in chemical, electric power, petroleum, environmental protection, railway and other industries.Comply with ASTM D664.



- ◎ Titration curve real-time display, titration curve and test results can be stored and printed.
- ◎ High titration accuracy and good stability.
- Automatic cleaning, automatic value adding.
- Automatically identify the end point, automatically filter out the false end point, and can manually select the end point.
- © Easy to operate, with workstation function.



Measuring range	>0.01mgKOH/g
Precision	relative error≤5%
Potential measuring range	-200~ 700mV
Basic error	0.1%FS±0.5mV
Burette volume	10mL
Burette minimum volume	0.01mL
Burette accuracy	±0.1%F·S
Instrument package	main machine, titration unit, computer (optional), printer (optional)
Overall dimension	350mm×280mm×178mm
Instrument weight	12kg

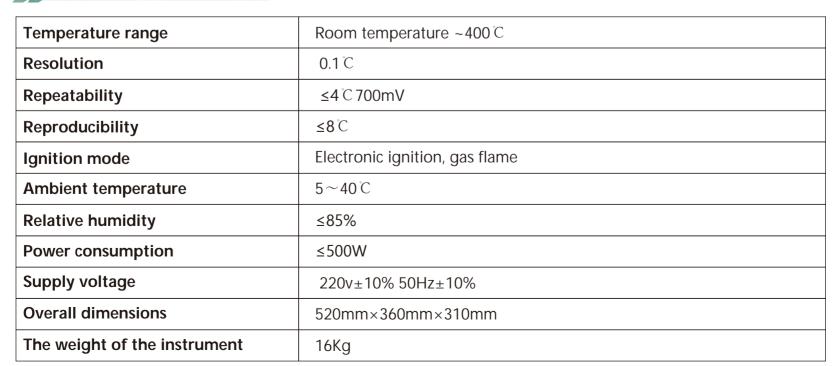


ICFP1020 Cleveland Flash Point Tester adopts analog control integrated software, modular structure, in line with ASTM D92, and other standards. Used in railway, aviation, electric power, oil industry and scientific research departments.





- Man-machine dialogue interface, touch screen keyboard, preset temperature, sample label, atmospheric pressure, test date and other parameters with prompt menu oriented input function.
- Simulation tracking display temperature rise and test time function curve, with Chinese operation software prompt modification function, with test date, test time and other parameters prompt function.
- Equipped with standard RS-232 computer interface, the lower machine stores 120 groups of historical data, and can be connected to the computerData can be stored and stored for a long time, data can be transmitted, and the upper computer can modify the parameters of the lower computer.
- O Calculate the atmospheric pressure correction.
- © Scanning, ignition, detection, printing data automatic completion.
- © Electronic ignition, forced air cooling.
- © Detect the ignition point.





ICFPP2030 automatic cold filter point tester is suitable for determining the cold filter point of distillate fuels, including diesel engine fuels containing flow improders or other additives, and fuels used in domestic heating devices. Used in petroleum, chemical industry, electric power, commodity inspection, universities, scientific research and other fields.



- The compressor refrigeration system to ensure that the required refrigeration depth.
- The built-in vacuum pump and electronic precision pressure balancing system to ensure that the suction pressure automatically balance at the set value.
- Automatically control the temperature difference between the cooling medium and the tested sample to ensure that the cooling speed is controlled and uniform and stable.
- Internal precision microcomputer timing, to ensure the accuracy of the judgment results.





Temperature range	Room temperature ~70°C
Resolution	0.1 °C
Ambient temperature	5~45°C
Pressure range	0~2kPa (200mm H2O)
Pressure resolution	1mm H2O
Relative humidity	≤85%
Working cold tank	Single tank two bath, two bath isothermal
Temperature measuring element	PT100
Cooling Mode	Compressor cooling
Timing	60.0s indexing 0.1s
Power consumption	≤900W
Supply voltage	220v±10% 50Hz±10%
Power consumption	≤900W
Supply voltage	220v±10% 50Hz±10%

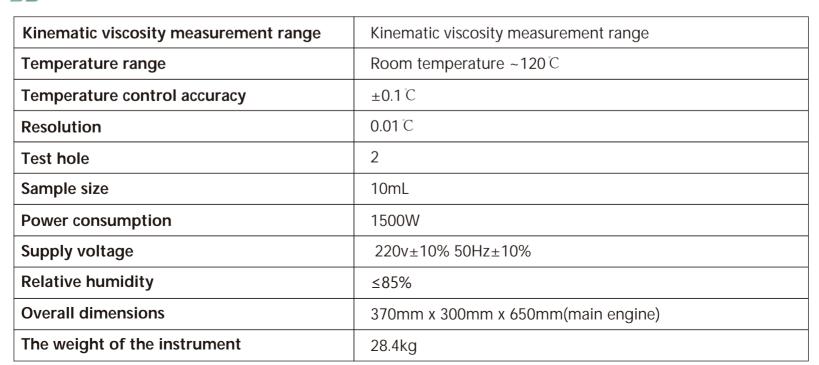




The IKV1011 Auto Kinematic Viscometer measures the kinematic viscosity of transparent or translucent liquids, including light and heavy fuel oils, lubricants, additives, and waste oils. It is a fully automatic model with constant temperature, viscosity test, cleaning, drying and other functions, without random operation of personnel, operators can leave the scene after lofting, and the instrument can automatically complete all tasks.



- Constant temperature, sampling, timing, calculation, printing, cleaning, drying and other processes are all High-speed CPU and high precision AD temperature control meter, with high reliability and temperature control
 accuracy, and can automatically store large capacity experimental data.
- Original PT100 sensor, temperature measurement is fast and accurate. Two samples can be measured • asynchronously at the same time.





IThe IKV1010 Kinematic Viscometer is suitable for determining kinematic viscosity of liquid petroleum products. It is one of the important physical and chemical properties indexes for the identification of oil grade and quality. In practical applications, choosing the right viscosity lubricating oil can make the mechanical equipment work normally and reliably.Conform to ASTM D44

- The constant temperature bath is a small cylinder cylinder, double layer, uniform temperature distribution in the bath, excellent temperature control effect.
- The actuator adopts SSR, which is characterized by no contact, no movement noise, no spark, vibration resistance, long service life of the instrument.
- Heater and flow tube and other bath internal parts are made of stainless steel, corrosion-resistant and durable.
- Equipped with lighting device, good light brightness, long energy saving life.
- Automatically calculate the product of the capillary constant and the average test time, high temperature control precision, good accuracy.
- Time the sample movement time, automatically calculate the final result of kinematic viscosity.
- Standard: Pinner viscosity tube
 Optional: Wulff tube, Finn tube, countercurrent tube.



And the second s	

Measuring range	0-10000mm2/s
Temperature range	Room temperature ~120°C
Number of capillaries loaded	4
Precision	±0.1 °C
Sample size	10mL
Power consumption	1000w
Supply voltage	AC 220v±10% 50Hz±10%
Relative humidity	≤85%
Overall dimension	545mm ×370mm ×500mm
Instrument weight	18.4kg



TIKV1012 Low Temperature Kinematic Viscometer adopts cascade spiral refrigeration technology, fast cooling speed, double circuit design, high reliability. It is suitable for the determination of aviation kerosene, lubricating oil, mineral insulating oil and other oil. Widely used in railway, petroleum, chemical industry, scientific research, measurement and other departments. Comply with ASTM D445.



- The constant temperature bath is a small cylinder cylinder, double layer, uniform temperature distribution in the bath, excellent temperature control effect.
- The actuator adopts SSR, which is characterized by no contact, no movement noise, no spark, vibration resistance, long service life of the instrument.
- Heater and flow tube and other bath internal parts are made of stainless steel, corrosion-resistant and durable.
- Equipped with lighting device, good light brightness, long energy saving life.
- Automatically calculate the product of the capillary constant and the average test time, high temperature control precision, good accuracy.
- Time the sample movement time, automatically calculate the final result of kinematic viscosity.
- Standard: Pinner viscosity tube.
 Optional: Wulff tube, Finn tube, countercurrent tube.



Г	
Kinematic viscosity measurement range	Kinematic viscosity measurement range
Temperature range	Room temperature ~120°C
Temperature control accuracy	±0.1 °C
Resolution	0.01 °C
Test hole	2
Sample size	10mL
Power consumption	1500W
Supply voltage	220v±10% 50Hz±10%
Relative humidity	≤85%
Overall dimensions	370mm x 300mm x 650mm(main engine)
The weight of the instrument	28.4kg



ID2000 Distillation analyzer uses mechanical, optical, electronic and computer technology in one, using imported temperature sensor detection system, can automatically complete the whole process of distillation experiment. It is suitable for the distillation characteristics of gasoline, diesel, kerosene, fuel oil, heavy oil and other mineral oils under atmospheric pressure. It is widely used in oil extraction, refining, chemical industry, aviation, navigation, railway, power plant and other industries. Comply with ASTM D86.



- Smart heating management system to ensure that the distillation rate meets the requirements of the experimental method.Record point user self-set:
- $\ensuremath{^{\odot}}$ The user can set the recovery volume to record the corresponding temperature
- The user can set the temperature for recording the corresponding recovery volume
- Automatic recording of specified recording points
- ◎ Five ways to end the experiment:

(1) End of the end point: end the experiment when the final distillation point is detected.

(2) Dry point end: The experiment ends when the dry point is detected.

(3) End of temperature: End the experiment according to the temperature value set by the user, and print out.

(4) Volume end: End the experiment according to the volume value set by the user, and print out.

(5) Keyboard end: Press the exit key to end the experiment and print out the output.

- Equipped with internal clock, no need to enter the experiment date, effective service life of 95 years.
- Monitored by the computer (wireless/wired communication, optional by the user).
- Reasonable structure, stable performance, simple operation, is the ideal analysis and testing equipment.



Temperature range	Room temperature ~400°C
Resolution	0.1 °C
Water bath constant temperature range	0 to 60 °C
Internal circulation recovery cylinder perimeter temperature	5~ 50°C
Distillation rate	4 ~5mL/min
Volume detection range	0~100mL
Resolution	0.1 mL
Temperature measuring element	PT100
Heating method	Infrared radiation heating
Refrigeration mode	Compressor refrigeration
power	2500W
Ambient temperature	5°C to 40°C
Overall dimension	550mm x 450mmx660mm
Instrument weight	65kg

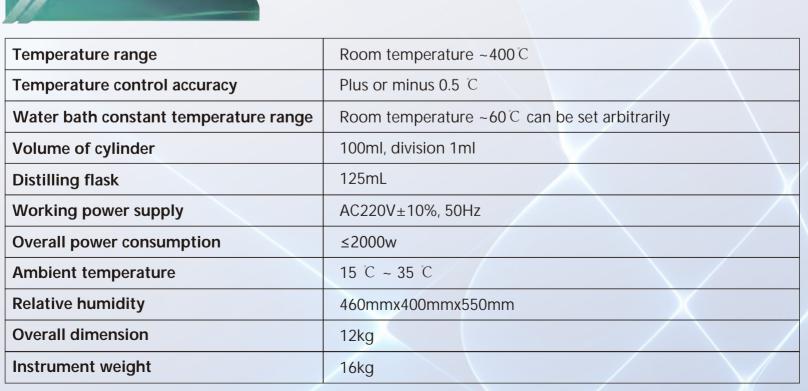




ID2002 Distillation analyzer is suitable for the distillation determination of natural gasoline, automotive gasoline, aviation gasoline, jet fuel, special boiling point solvents, naphtha, diesel, distillate fuel and similar petroleum products. It is used in the distillation determination of natural gasoline, automotive gasoline, aviation gasoline, injection fuel, solvent with special boiling point, naphtha, diesel, distillate fuel and similar petroleum products.



- Instrument for the double tube working mode, can be carried out a single tube independent test, but also two samples of the same specifications at the same time test, greatly improve the work efficiency.
- Use of special heating furnace form, to ensure the safety of the test, heating power continuous adjustable.
- © Cooling speed is fast, the bath temperature can be reduced from room temperature to 0 ° C in about 50 minutes.





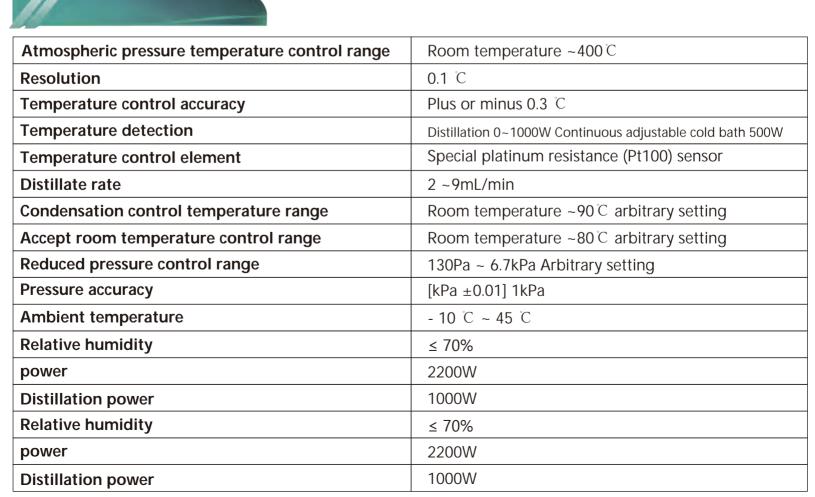
IVD2004 Automatic Vacuum Distillation is special instrument for detecting the boiling point of partially or completely evaporated petroleum products. The instrument uses single chip microcomputer as the system control core, guided operation, the measurement process automation degree is high. Set the constant temperature of circulating cooling water and receiving chamber and the required decompression pressure according to the measurement needs, control the distillation speed and constant steam decompression pressure, cooling circulating water temperature and receiving chamber temperature. Comply with ASTM D1160



 Smart heating management system to ensure that the distillation rate meets the requirements of the experimental method.

Record point user self-set:

- $\ensuremath{\,^{\odot}}$ The user can set the recovery volume to record the corresponding temperature
- $\ensuremath{\,^{\odot}}$ The user can set the temperature for recording the corresponding recovery volume
- $\hfill \odot$ Automatic recording of specified recording points
- Five ways to end the experiment:
 - (1) End of the end point: end the experiment when the final distillation point is detected.
 - (2) Dry point end: The experiment ends when the dry point is detected.
 - (3) End of temperature: End the experiment according to the temperature value set by the user, and print out.
 - (4) Volume end: End the experiment according to the volume value set by the user, and print out.
 - (5) Keyboard end: Press the exit key to end the experiment and print out the output.
- © Equipped with internal clock, no need to enter the experiment date.









IDWC260 Dean Stark Distillation Apparatus Water Content Tester is used to determine the moisture content in petroleum products to ensure that the quality, stability and performance of petroleum products meet the requirements. Used in petroleum, chemical industry, electric power, commodity inspection, universities, scientific research and other fields.



- Reasonable design of the experimental utensil holder, convenient installation and disassembly of the condensing tube.
- Two groups of tests can be carried out at the same time, requiring external circulation of cooling water.



Temperature range	Room temperature ~300°C
Heating method	Heat distillation
Distillation flask volume	500ml
Working power supply	AC220V±10%, 50Hz
Ambient temperature	≤35 °C
Relative humidity	≤85%
Overall power consumption	≤1100W
Electric furnace heating power	1000W
Instrument size	470mm×360mm×290mm
Package size	500mm×380mm×320mm





IRP1050 Rust-preventing Characteristics tester is used to evaluate the anti-rust ability of iron parts when adding inhibitor mineral oil, turbine oil and water, and is also suitable for the determination of the anti-rust ability of hydraulic oil and circulating oil. Used in electric power, petroleum, chemical, commodity inspection and scientific research departments. Comply with ASTM D665.



- © Computer temperature control, automatic timing, high precision, good accuracy.
- ◎ Display a variety of parameter prompts such as year, month, date and current clock.
- Stainless steel bath.



Temperature control range	Room temperature ~100°C
Temperature control accuracy	±0.5 °C
Resolution accuracy	±0.1
Time control range	0 to 99 hours
Stirring speed	1000r/min
Maximum power consumption	2000W
Burette accuracy	±0.1%F·S
Sample holding hole	4个
Ambient temperature	5~40°C
Relative humidity	≤85%
Working power supply	AC220V±10%50Hz
Overall dimension	520mm×330mm×570mm
Instrument weight	9.5kg



ICC2012 copper corrosion tester is suitable for determining the degree of corrosion of copper sheets by aviation gasoline, jet fuel, automotive gasoline, natural gasoline or other oddities with Red vapor pressure not greater than 124 kPa (930mm Hg), solvent oils, diesel oil, distillate fuel oil, lubricating oil and other petroleum products. Comply with ASTM D130, ASTM D4048, ISO 6251.



- ◎ Test bath with precise temperature control of the oil bath.
- Copper corrosion test time can be set and alarm.
- ◎ PID temperature control technology.
- ◎ Compact structure, beautiful shape, easy to operate.



Temperature control range	Room temperature ~150°C
Temperature control accuracy	±0.1 °C
Resolution accuracy	±0.1
Time control range	1 min to 24 hours
Temperature control heating power	600W
Auxiliary heating power	1000W
Experimental port	'4
Number of test samples	1~16
Ambient temperature	5~40°C
Relative humidity	≤85%
Overall power consumption	≤1800W
Working power supply	AC220V±10%50Hz
Overall dimension	480mm×360mm×520mm
Instrument weight	18kg





IFP5901 Freezing Point Tester uses a built-in compressor cooler, the whole instrument structure is reasonable and compact. The microcomputer system has a colorful display interface, which not only makes the whole test process fully automated, but also clearly displays the test state and test data. Applicable to ASTM D5901.



- All Settings and test operations can be carried out on the control panel;
- Large LCD screen and windows Chinese interface make the setting and operation more convenient;
- The temperature control state, cooling curve and detection times during the test can be displayed in real time through the display screen;
- The high stability refrigeration system ensures the refrigeration effect required by the test;
- Just connect the printer to get detailed test data;
- The use of high-sensitivity optical fiber detection device, can correctly measure the real-time freezing point;
- With automatic detection of sample fire and fire extinguishing function;
- With automatic fault detection and alarm function;
- The test instrument is equipped with a standard input outlet (RS-232C) for data input to the microcomputer, which is c onducive to the laboratory network

Network quality management.

• The tester has the function of handling remote maintenance operation control through information control.

Temperature range	-80~40 [°] C
Refrigerating plant	Cascade cooler
Temperature unit	0.1 °C
Temperature detection	Special platinum resistance sensor
Freezing point detection	Optical fiber sensor
Program control mode	Microcomputer control
Cold trap cooling	Compressor refrigeration
print	Own printer
Report the end of the test	After the end of the test, the buzzer sounded (10 seconds), and then the printer printed out the test conditions and test data.
Abnormal alarm	The alarm sounds and the display displays the fault content.
Power source	AC-220V,50/60Hz
Power	1500W
Dimension	550mm×450mm×600mm
Weight	30-35kg





Water Purification System Freeze Dryer/Lyophilizer Biosafety Cabinet/Laminar Flow Biofermentation Solution Shaking Incubator/Shaker Cold Storage Solution Glassware Washer Autoclave Climate Chamber



Add. : No. 176 Jufeng Road, 266199, Qingdao, China Tel. : +86 532 8789 0634 Email: info@innobiomed.com Web: www. innovabiomed.com