



# Obsnap

the professional



MARCH 2014

**MERIDIAN**  
[www.meridianinstruments.com](http://www.meridianinstruments.com)

MERIDIAN SCIENTIFIC DIVISION  
INDUSTRIAL, LABORATORY & BIOMEDICAL EQUIPMENT



MERIDIAN has a team of expertise with good total experiences of more than 20 years. We partner with ISO certified vendors that specialized in design; development and manufacturing of wide range of Climatic Test Chambers. Quality is our hallmark, and we believe in giving the best especially with the material and building component of the chambers, we extensively use components from makers origin in Germany, France, Japan, USA etc.

## Programmable Temperature and Humidity Chamber



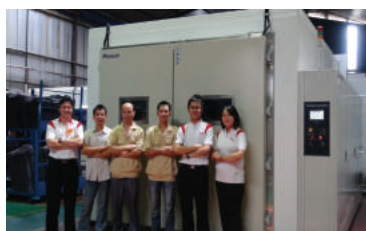
Call us today for details information

- Robust construction, with good thermal insulation material
- Superior Programmable Touch screen Controller with '2 in 1' function -Controller and Recorder function
- Good Air circulation system provide high uniformity inside test area
- Temperature range: -20°C/-40°C/-70°C to 150°C, Humidity of 20% to 98%

Model	Capacity/L	Internal Dimension (WxDxH)mm
MRD-TH-50	50	360 x 350 x 400
MRD-TH-100	100	450 x 450 x 500
MRD-TH-250	250	600 x 520 x 800
MRD-TH-800	800	1000 x 800 x 1000
MRD-TH-1000	1000	1000 x 1000 x 1000



Honda Malaysia  
400L MERIDIAN Chamber



MERIDIAN Walk in Chamber

## Salt Spray Corrosion Machine



- High quality, long lasting PP material
- High precision Fuji Japan controller, or programmable controller (optional)
- Various size is available, please call us for pricing

Model	Capacity/L	Internal Dimension (WxDxH)mm
MRD-SP-150	108L	600 x 450 x 400
MRD-SP-250	270L	900 x 600 x 500
MRD-SP-750	412	1100 x 700 x 500



MERITONE's mission is to provide customers with advanced technology for environmental vibration test simulation, shock and impact test equipment. Meritone primarily serve to provide durability and reliability tests for packaging, automotive and electronic industries. We are offering total solution for the customer and customize the specialized testing requirement, is one of our competitive strength.

## Mechanical Vibration Test System Model: MRV3000



MRV3000 installed at Flextronics Malaysia by our service engineer (total 4 units)

Vibration testing system is important in simulate the vibration condition which occur in nature like during transportation by truck, ship and etc.

- Low noise operation
- With good vibration absorber
- Built-in vibration forecast program which is very simple and user friendly
- Simultaneously 4 points vibration allow the magnitude of vibration is even on the vibration platform

Specification:

Rate peak force :	600kgf
Dimension of platform :	500W x600 Dmm
Max weight tested :	130kg
Frequency range :	5-100Hz
Max acceleration (g) :	0-11G (peak)
Max. Rated travel (pk-pk) :	0-3.0mm
Testing mode :	Random, Sine, Shock
Control type :	Closed loop

## High Performance Package Drop Test Model : MDT130

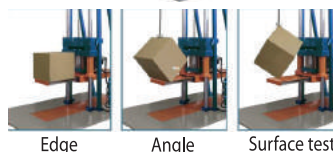


Package Drop test simulates actual shocks by dropping the package and its content freely against a rigid plane surface from a predetermined height.

- Easy and convenient handheld operating controller
- Unique mechanical design arm
- Powerful software and hardware system
- The use of hydraulic system effectively reduce snubber arm residual force to ensure smooth, reliable, low noise operation
- Pressure automatically 'lock in' to prevent the arm from abnormally operation
- A convenient flat, edge, corner drop test

Specification:

- Testing Height: 300mm-1300mm
- Weight of specimen: 85kg
- Testing size: 800 x 800 x 800mm
- Arm Height: 50cm
- Pressure requirement: 7kg/cm2



UV Accelerated Weathering Chamber at University of Malaya



SAMHEUNG establish in 1982, throughout over 30 years, has been providing highly reliable and precision equipment. Generally, SAMHEUNG assist in accomplishing successfully the testing tasks in the laboratory for the fields of biology, chemistry, medicine, pharmacology etc.  
SAMHEUNG innovate with deep product lines that are cost effective, durable and again, reliable.

## Universal Oven



- Temp Range : Ambient +5°C to 250°C
- Excellent durability internal chamber and shelves are made of high quality 304 grade stainless steel.
- Silicon rubber packing for better heat consistency
- Microprocess PID Membrane Touch Digital controller
- Built in Digital Counter Timer, Over Temp Protection
- Door built with over pressure safety protection mechanism
- Powerful lock devise, low noise operation
- Complete with viewing window

Universal Oven:

- 1) Natural Oven remark as (°)
- 2) Forced Convection Oven remark as (\*)

Model	Capacity L	Int. Dimension (WxDxH)	Price RM
°SH-ND054	54L	380 x 340 x 420	RM 4314
°SH-ND0100	100L	480 x 400 x 530	RM 4591
*SH-FD054	54L	380 x 340 x 420	RM 4646
*SH-FD0100	100L	480 x 400 x 530	RM 5392
*SH-FD0149	150L	555 x 450 x 600	RM 5789
*SH-FD0250	250L	700 x 450 x 800	RM 8561
*SH-FD0550	546L	700 x 650 x 1200	RM 16,814

## Professional Incubator



- Temp Range : Ambient +5°C to 70°C
- Forced Convection Type, improve temperature uniformity
- Intelligent microprocess PID temperature controller
- Complete with inner view window for convenient monitoring of samples
- Thermocouple adopts Platinum Resistance Temperature Detector (R.T.D) which is most sensitive and precise under 100°C
- Optional : Precise cooling device allows SAMHEUNG incubator to reach temperature down to -5°C

Model	Capacity L	Int. dimension (WxDxH)	Price RM
SH-FIB54	54L	380 x 340 x 420	RM 4178
SH-FIB100	100L	480 x 400 x 530	RM 4836
SH-FIB149	150L	555 x 420 x 600	RM 5180
SH-FIB250	250L	700 x 450 x 800	RM 6919
SH-FIB54R	54L, with refrigerator	380 x 340 x 420	RM 8440
SH-FIB149R	150L, with refrigerator	555 x 420 x 600	RM 9817

Incubator with refrigerator (-5°C to 60 °C)

## Tube Furnace 1200 °C



- Intelligent PID Microprocessor temperature controller (Optional Programmable Controller)
- Usually used in laboratory, for heat treatment process that required gas atmosphere
- Temp Accuracy & Stability ±1°C

Model	Internal Diameter (mm)	Heated Length (Heating Zone)	Price RM
SH-TMFC-50	50	300 mm	RM 8804
SH-TMFC-80	80	300 mm	RM 9598
SH-TMFC-100	100	300 mm	RM 10,838

## Vacuum Oven



Vacuum oven usually applied on oxygen sensitive and heat-sensitive materials such as electronic & electrical components, cosmetics, food, solvent and etc.

- The fully heating from three sides of the chamber guarantees quick and better temperature uniformity
- Complete with tempered viewing glass for sample observation during test
- Microprocess Digital PID membrane touch controller
- With user friendly all-in-one control panel

Model	Capacity L	Price RM
SH-VDO30	27L	RM 9761
SH-VDO70	64L	RM 11,978
SH-VDO125	125L	RM 15,704



Vacuum Oven with pump, and chiller

Model	Capacity L	Price RM
SH-HVDO30F	27L	RM 25,863
SH HVDO70F	64L	RM 32,447

Vacuum Oven with pump and chiller

## Muffle Furnace 1200 °C



- Come with Intelligent PID Microprocessor temperature controller (Optional programmable controller)
- Strong durability and rigid structure against physical shock
- Good insulation layer (ceramic Board and wool) minimize heat loss
- Special design prevent damage of heating element caused by outside contact
- Temperature Accuracy : ±1°C

Model	Capacity L	Int. dimension(WxDxH)	Price RM
SH-MF5L	5L	150 x 300 x 100	RM 5808
SH-MF13L	13L	250 x 350 x 150	RM 7270
SH-MF27L	27L	300 x 300 x 300	RM 14,383



Refrigerated Circulating Bath



General Water Bath



Circulation Water Bath

- Temp Range : Ambient +5°C to 99°C
- Time Range : 00.00 to 99HR 59MIN (MIN SEC)
- Excellent durability, bath is made of seamless stainless steel
- External body : steel plate SS41 with powder coated
- Comes with stainless steel LID cover, it prevents evaporation, and improve temperature consistency in the bath.
- Precision Control system : Microprocess PID Membrane Touch Digital Controller
- Optional : Circulation model with powerful circulation pump, provide much more excellent temperature distribution
- Optional : Precise cooling device allows SAMHEUNG waterbath to reach temp down to -20°C or -40°C (optional)

Model	Capacity L	Int. dimension(WxDxH)	Price RM
SH-GWB6D	6L	300 x 155 x 170	RM 1785
SH-GWB11D	11L	300 x 240 x 170	RM 1951
SH-GWB22D	22L	500 x 295 x 170	RM 2497
SH-WB11	11L c/w circulation	240 x 300 x 150	RM 2849
SH-WB22	22L c/w circulation	500 x 300 x 150	RM 3269
SH-WB13R	13L, c/w refrigerator	250 x 300 x 150	RM 5718
SH-WB22R	22L, c/w refrigerator	350 x 420 x 150	RM 6960

## Digital Oil Bath



- Temp Range : Amb  $\pm 5^{\circ}\text{C}$  to  $300^{\circ}\text{C}$
- Complete with powerful circulation motor, which provide high thermal uniformity
- Digital P I D Temperature Controller

Model	Capacity L	Int. dimension (WxDxH)	Price RM
SH-OILWB10	13L	250 x 300 x 170	RM 3820
SH-OILWB20	24L	350 x 400 x 170	RM 4441
SH-OILWB40	48L	600 x 400 x 200	RM 5545

## Cold Lab Chamber $0^{\circ}\text{C}$ to $10^{\circ}\text{C}$



### Come with double door system:

Outer door is made of double safety protection glass, and inner door is designed as 4 sections. This helps minimized temperature loss into outside environment

Temp Controller : Microprocess P I D Digital Controller

Model	Capacity L	Int. dimension (WxDxH)	Price RM
SH-CLC686	686L	700 x 700 x 1400	RM 14,567
SH-CLC1170	1176L	1200 x 700 x 1400	RM 19,789

## Vertical Laminar Flow Cleanroom Bench



### Model SH-VCB1 RM 10,369

- Uses high quality HEPA Filter  $0.3\mu$  99.97%, filter tiny particle size
- Excellent chemical resistance working table, made of Stainless Steel SUS 304 with Hair Line Finished
- Powerful, uniformly distributed, UV lamp with selectable time range 00.00 to 99HR 59 MIN
- FL lamp installed for lighting
- Intelligent LCD digital controller
- Real-time air flow adjustment and monitoring
- Auto self-testing (automatically check the status of clean bench), self-diagnosis function, auto safety device on filter replacement alarm signal
- Purity Below to Class 100

## Climatic Temperature and Humidity Chamber



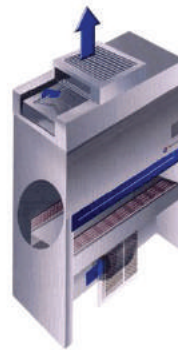
Climatic temperature and humidity chamber has a wide range of models with various capacities and temperature range.

Capacity : 150L, 250L, 400L 800L, 1200L and etc.  
Temperature range :  $-20^{\circ}\text{C}/-40^{\circ}\text{C}/-70^{\circ}\text{C}$  to  $150^{\circ}\text{C}$ , Humidity of 20% to 98%

Besides with robust construction, and good air circulation system, the chamber also equipped with high precision PT100 temperature sensor and high accuracy electronic humidity sensor to improve its performance. It comes with user friendly programmable Touch screen Controller that with controlling and recording functions.

Call us for pricing

## Biosafety Cabinet



### Model: SH-BCB1 RM 11,394

- Uses high quality HEPA Filter  $0.3\mu$  99.97%, filter tiny particle size
- Pre-filter: efficiency nylon filter extends the lifespan of the main filter
- Excellent chemical resistance working table, made of Stainless Steel SUS 304 with Hair Line Finished
- Comfortable armrest
- Low noise level
- Powerful, uniformly distributed, UV lamp with selectable time range 00.00 to 99HR 59 MIN
- Intelligent LCD digital controller
- Real-time air flow adjustment and monitoring

## Autoclave

More userfriendly and more protection series!!!



- Max Temp :  $135^{\circ}\text{C}$
- Max Pressure :  $2.65\text{kgf}/\text{cm}^2$
- Steriling time 00.00 to 99HR 59MIN controlled by digital PID controller
- Thermocouple R.T.D Type
- Simple and user friendly full auto sterilizer: can proceed whole process such as sterilization, vacuum automatically
- Has electrically and physically double safety device and temperature over-heating and over-pressure, sterilizing finished buzzer

Model	Volume/L	Price (RM)
SH-AC60	60	RM 12,621
SH-AC80	80	RM 15,444
SH-AC100	110	RM 18,509
SH-AC128	128	RM 23,312

## Oil Rotary Pump



Model : W2V10  
Pressure G.B Close :  $5 \times 10^{-2}$  Torr (6.7 x  $10^{-2}$  pa)  
Pressure G.B Open :  $5 \times 10^{-2}$  Torr (6.7 pa)  
Oil Capa : 500mL  
Pumping Speed : 100L/min

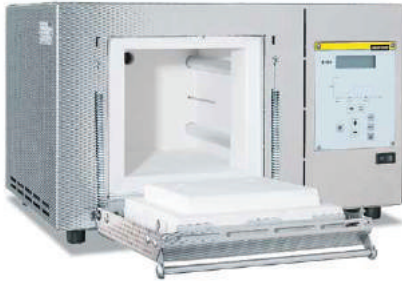


SAMHEUNG oven used by KJ Can



Nabertherm develops and produces laboratory and industrial furnaces for various applications for over 60 years. Nabertherm has the widest and deepest range of furnace in the world with large worldwide customer references. Its furnace is well-known in the market for its durability, excellent design, good quality and cost efficiency.

## Professional Muffle Furnace



Perfect for many applications in the laboratory

- Tmax 1100 °C, working temperature 1050 °C
- Heating from two sides from heating element in quartz glass tubes
- Maintenance-friendly replacement of heating elements and insulation
- Multilayered insulation with fibre plates in the furnace chamber
- Housing made of sheets of textured stainless steel
- Dual shell housing for low external temperatures and high stability
- Exhaust air outlet in rear wall

Model	Volume/L	Internal Dimension (W X D X H)mm
LE 4/11	4	170 x 200 x 170
LE 4/11	6	170 x 200 x 170
LE 4/11	14	220 x 300 x 220

## Annealing, Hardening and Brazing Furnace



To withstand harsh use in the laboratory, e.g. when heat-treating metals

- Tmax 1280 °C
- Three-sided heating from both sides and the floor
- Heating elements on support tubes ensure free heat radiation and a long service life
- Floor heating protected by heat-resistant SiC plate
- Multilayer insulation with high-quality lightweight refractory bricks in the furnace chamber

Model	Volume/L	Internal Dimension (W x D x H)mm
N 7/H	7	250 x 250 x 120
N 11/H	11	250 x 350 x 140
N 31/H	31	350 x 350 x 250
N 41/H	41	350 x 500 x 250

## Ashing Furnace

- A special air intake and exhaust system allows air exchange of more than 6 times per minute
- Incoming air is preheated to ensure a good temperature uniformity.
- Tmax 1100 °C
- Heating from two sides by ceramic heating plates
- Ceramic heating plates with integral heating element which is safeguarded against fumes and splashing, and easy to replace
- Highly durable, high-performance cured vacuum fibre module lining
- Housing made of sheets of textured stainless steel
- Dual shell housing for low external temperatures and stability



Model	Volume/L	Internal Dimension (W X D X H)mm
LV/LVT 3/11	3	160 x 140 x 100
LV/LVT 5/11	5	200 x 170 x 130
LV/LVT 9/11	9	230 x 240 x 170
LV/LVT 15/11	15	230 x 340 x 170

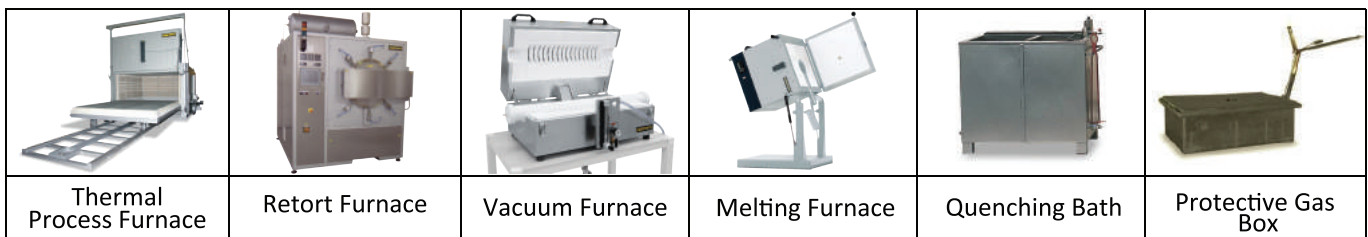
\* LV (flap door), LVT (lift door)

## Compact Tube Furnace



- Tmax 1100 °C or 1300 °C
- The furnace achieve very high heat-up rate
- Very compact outer dimensions and low weight
- Housing made of sheets of textured stainless steel
- Working tube made of C530 material including two fiber plugs as standard
- All models are designed for horizontal application. If the customer requires protective gas atmosphere, a separate working tube, e.g. made of quartz glass, must be inserted in the working tube

Model	Tmax °C <sup>1</sup>	Inner Tube Ø mm	Heated length /mm
RD 15/150/11	1100	15	150
RD 30/200/11	1100	30	200
RD 15/150/13	1300	15	150
RD 30/200/13	1300	30	200



\* Nabertherm has wide range of laboratory and industrial furnaces for different applications, for details please contact us. 03 5621 5186

RAYNOVA high speed centrifuge is widely used in chemistry analysis, biochemistry, cellular + molecular biology and clinical Labs. The centrifuge is ideal for high-end research applications such as sedimentation of cells and viruses, separation of sub-cellular organelles and isolation of macromolecules such as DNA, RNA, proteins or lipids.

**Mini Centrifuge RNV1008 RM 870**



- Dual door interlock design, for safety
  - Ideal for quick spin down and micro filtration
  - Precise control of speed and run time with efficient separation
- Max. Speed [rpm] : 7000  
 Max. RCF [g] : 2680  
 Rotor Capacity : 8 x 0.2/0.5/1.5/2.0ml tube; 16 x 0.2ml PCR strips, 2 x 0.2ml PCR8 strips; Slide rotor  
 Continuous operation
- Run Time :

**Clinical Centrifuge RNV0412**



Clinical centrifuge is ideal for the separation of serum, plasma, urea, blood samples and other routine applications in hospital and research laboratories.

- Passed EN61010-2-101:2002 requirements for in vitro diagnostic (IVD) medical equipment
- Come with high strength plastic rotor and excellent balance technology to guarantee a quiet and stable operation
- Brushless DC motor drive quickly and effortlessly accelerates the rotor to set speed
- High accuracy of speed, excellent performance
- Precise control speed and time with efficient separation

**RM 2698**

- Max. Speed [rpm] : 300-4500, increment: 100  
 Max. RCF [g] : 2490 x g, increment: 100 x g  
 Speed Accuracy [rpm] : ±20  
 Rotor Capacity : 12 x 10ml/7ml/5ml; 8 x 15ml  
 Run Time : 30sec-99min-HOLD (Continuous operation)

**High Speed Mini Centrifuge RM 2821**



- Patented special multi-flow air cooling design helps keep lower rotor temperature to protect sensitive sample
- Bio-safe rotor/anti sample overflow prevent simple leakage or microbial contamination
- Cast iron casing with low gravity, provides stable and reliable running at maximum speed

**RNV2012**

- High strength plastic rotor with CE mark.
- Low noise ≤54dB;
- Delivers fast acceleration and deceleration

**RNV2012 Plus**

- Aluminum alloy rotor with high mechanical strength
- Fully autoclavable and unlimited service life

- Max. Speed [rpm] : 15000rpm (500-15000rpm), increment 100rpm  
 Max. RCF [x g] : 15100 x g, increment:100 x g  
 Speed Accuracy [rpm] : ±20 rpm  
 Rotor Capacity : 0.2ml/0.5ml/1.5ml/ 2ml x 12  
 Run Time : 30sec-99min-HOLD (Continuous operation)

**Hematocrit Centrifuge RNV 1424**



Hematocrit centrifuge with AC24P rotor is used for determination of volume fractions of erythrocytes in blood and also for separation of micro blood and solution. Hematocrit centrifuge with A24-2P rotor is used for extraction of DNA and RNA.

- Max. Speed [rpm] : 200-14000, increment: 10  
 Max. RCF [g] : 18260 x g, increment: 10 x g  
 Speed Accuracy [rpm] : ±30  
 Rotor Capacity : 24 x 1.5/2ml (14000rpm)  
 Hematocrit rotor: 24 capillary tubes (12000rpm)  
 Run Time : 30sec-99min-HOLD (Continuous operation)

**Rotors and adapters**



A24-2P

AC24P

**RM 5850**

**High Speed Micro Centrifuge (RNV 3024) RM 6061**  
**High Speed Micro Refrigerated Centrifuge (RNV 3024R) RM 14,538**



- Dual door interlock design for safety
- Patented special multi-flow air cooling design helps keep power rotor temperature to protect sensitive sample
- Bio-safe rotor/anti sample overflow prevent simple leakage or microbial contamination
- High strength aluminum alloy rotor can be fully autoclaved, for unlimited service life

**Powerful and efficient cooling system (RNV3024R)**

- Pre-cooling keeps the chamber at the pre-set temperature
- Powerful cooling system and maintains the samples temperature under 2°C at maximum speed.
- Sound alert and the lid remains closed after operation to maintain the chamber temperature

- Max. Speed [rpm] : 15000rpm (200-15000rpm), increment:10rpm  
 Max. RCF [g] : 21380 x g, increment: 10 x g  
 Speed Accuracy [rpm] : 20 rpm  
 Temperature Range : -20°C ~ 40°C (model RNV3024R)  
 Rotor Capacity : 5ml x 18; 0.2ml/0.5ml/1.5ml/ 2ml x 24; 0.5ml x 36; PCR8 x 4  
 Run Time : 30sec-99min-HOLD (Continuous operation)



**RNV7-H550-S RM 1720**  
**Digital LED Magnetic Hotplate Stirrer with Electronic Contact Thermometer**

- LED display target and actual temperatures
- External temperature sensor PT1000 is available, display and control actual medium temperature, control accuracy of  $\pm 1^{\circ}\text{C}$
- Automatically stops heating once exceed secure temperature

Dimension of work plate [mm] :	184 x 184 (7inch)
Work plate material :	Glass ceramic
Max. stirring quantity (H <sub>2</sub> O), L :	10
Speed Range (rpm) :	0-1500
Heating temperature range ( $^{\circ}\text{C}$ ) :	RT-550, increment 5
Safety temperature ( $^{\circ}\text{C}$ ) :	580
Protection class according to DIN :	IP21
EN60529	

**RNV7-H280-Pro RM 1104**  
**Digital LED Magnetic Hotplate Stirrer**



Dimension of work plate [mm] :	$\varnothing$ 135 (5inch)
Work plate material :	Stainless steel with ceramic coated hotplate
Max. stirring quantity(H <sub>2</sub> O), L :	3L
Speed range [rpm] :	0-1500rpm
Heating temperature range ( $^{\circ}\text{C}$ ) :	RT-280 $^{\circ}\text{C}$ , increment 1
Protection class :	IP21

With external temperature sensor PT 1000

**RNV7-Pro RM 1637**  
**Digital LCD Magnetic Stirrer**



- LCD displays target and actual speeds
- Brushless DC motor maintenance free and explosion-proofed, accurately control speed
- Glass ceramic plate is extremely resistant to corrosion and easily clean

Dimension of work plate [mm] :	184 x 184 (7 inch)
Work plate material :	Glass ceramic
Max. stirring quantity(H <sub>2</sub> O), L :	20
Speed range [rpm] :	100-1500
Protection class according to DIN :	IP21
EN60529	

**RNV-S RM 1153**  
**Classic Magnetic Stirrer**



Dimension of work plate [mm] :	$\varnothing$ 135 (5 inch)
Work plate material :	Stainless steel with ceramic coated
Max. stirring quantity(H <sub>2</sub> O), L :	20
Speed range [rpm] :	0 - 1500
Speed display :	Scale
Protection class :	IP42

**RNV-H-S10 RM 5010**  
**(10-Channel Classic Magnetic Hotplate Stirrer)**



- High-performance multi-position magnetic stirrer with uniform temperature distribution
- Individually controlled stirring for consistency with various samples
- Electronic speed control motor provides constant speed
- DC brushless motor maintenance free and quiet running

Dimension of work plate [mm] :	180 x 450
Work plate material :	Stainless steel with silicone Film (anti-slip and anti corrosion)
Max. stirring quantity (H <sub>2</sub> O), L :	10
Speed Range (rpm) :	0-1100
Heating temperature range ( $^{\circ}\text{C}$ ) :	RT-120
Safety temperature ( $^{\circ}\text{C}$ ) :	140
Protection class according to DIN :	IP42
EN60529	

**RNV-MXS RM 690**  
**Vortex Mixer**



The Vortex mixer widely used in life science, physical and chemical analysis fields, for vigorous re-suspension of cells or chemical pellets in tubes up to 15 ml.

- Specially designed vacuum suction feet hold to the work surface and prevent the unit from movement.
- Aluminium cast base avoids unnecessary "walking"
- Wide range of accessories available

Mixing motion :	Orbital
Orbital diameter (mm) :	4
Speed range (rpm) :	0-2500
Run type :	Continuous/touch operation

**RNV-MXM RM 1448**  
**Microplate Mixer**



Compact and universal Microplate Mixer can hold one or two microplates, used in life science field including microbiology, cell and molecular biology, immunology and biotechnology.

- Compact and universal Microplate Mixer suitable for small vessels and 96 microplate
- Wide range of accessories, easy installation and replacement
- Continuous operation

Shaking movement :	Orbital
Orbital diameter (mm) :	4.5
Max. shaking weight (with accessory) (kg) :	0.5
Speed range (rpm) :	Single microplate : 0-1500 Double microplate : 0-1000



Test Tube Adaptor

**Rotator RNV-RD-Pro RM 2639**  
**RNV-RL-Pro RM 2990**



The rotator give gentle but effective mixing of biological samples to be held in 1.5ml to 50ml micro tubes.

- The rotator comes with disk type design
- \* Dish type design (RNV-RD-Pro)
- \* Rotisserie design (RNV-RL-Pro)
- Digital control speed and allowing procedures to be accurate
- LCD displays timer (1-1199min)
- End-over-end or rolling action, gives gentle but effective mixing
- Adjustable speed range of 10 to 70rpm
- Adjustable mixing angle between 0 and 90
- Used with a wide variety of accessories
- Continuous and timed quiet operation

**RNV-T6-S Tube Roller** **RM 1448**



Provides a gentle but highly efficient rocking and rolling motion, for complete mixing

- Speed range of 0-70rpm
- Six roller design with small footprint and easy clean
- Designed for continuous operation
- Can be used in cold room or in incubator

Max. load capacity [kg] : 4

**RNV-0330 Pro Digital Orbital Shakers** **RM 2873**



- LCD displays speed and time
- Wide range of platforms for use with a variety of vessels
- Free software shaker, computer can control and document all operation values via RS232 interface
- With universal attachment, or dish attachment or, with flask fixing clip
- Over speed detection and protection



Fixing clip

Shaking motion : Orbital  
Orbital diameter[mm] : 10  
Max. load capacity (with platform) [kg] : 7.5  
Speed range[rpm] : 100-500(orbital)  
Protection class acc. DIN EN60529 : IP21

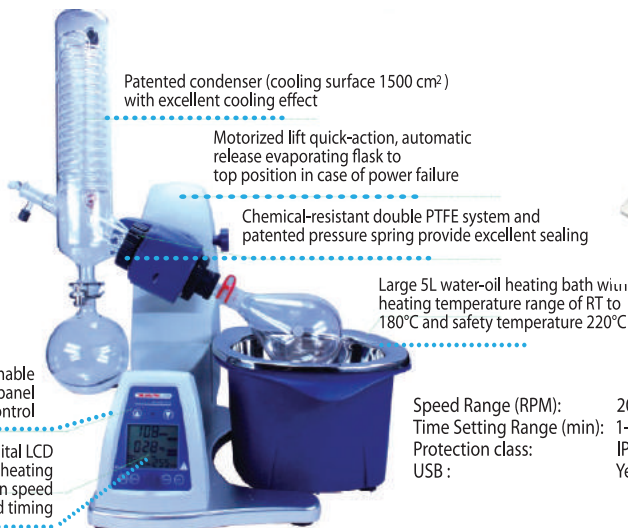
**Rocking Shaker RNV-D3309-Pro 3D Shaker RNV-R330 Pro** **RM 3340**



**RNV-D3309-Pro**  
- Gentle 3D motion with fixed angle 9°  
- Load up to 5kg  
- Speed range of 10-70rpm

**RNV-R330-Pro**  
- Smooth see-saw rocking motion with fixed angle 9°  
- Load up to 10kg  
- Speed range of 10-70rpm

**RNV100-PRO Rotary Evaporator** **RM 11,658**



Patented condenser (cooling surface 1500 cm<sup>2</sup>) with excellent cooling effect

Motorized lift quick-action, automatic release evaporating flask to top position in case of power failure

Chemical-resistant double PTFE system and patented pressure spring provide excellent sealing

Large 5L water-oil heating bath with heating temperature range of RT to 180°C and safety temperature 220°C

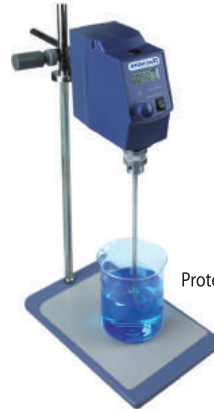
Designed a detachable operating panel allows remote control

Easy to read large digital LCD screen displays heating temperature, rotation speed and timing

Speed Range (RPM): 20-280  
Time Setting Range (min): 1-999  
Protection class: IP20  
USB : Yes

The RNV100-PRO is available with vertical glassware (including condenser, evaporating flask and receiving flask)

**RNV20-Pro Digital LCD Overhead Stirrer** **RM 2523**



- High reliability, long continuous usage, outstanding performance
- Overload protection - motor would automatically stop in case of continuous overload
- Anti-split samples
- Brushless DC motor drive, low noise and maintenance free

Package include universal stand, blade stirrer

Max. stirring quantity[H<sub>2</sub>O], L : 20  
Speed range (rpm) : 50-2200  
Max viscosity : 10,000 mPas  
Protection class acc. to DIN/EN 60529 : IP21  
RS 232 interface : Yes



**RNV20-S Digital LED Overhead Stirrer** **RM 1939**



- Same features as above, except RS 232 interface

**RNV-160 Handheld Homogenizer** **RM 3561**



- Use for mixing, emulsification, shredding, or chopping
- Easy to hold and light weight for one hand operation
- Sample Volume Range: 0.1-50 ml or 1-250ml
- Autoclavable 316 L stainless steel shafts, inert to aggressive solutions
- All shafts are interchangeable shafts and are easily removed for cleanup

Speed Range : 8000-30000rpm  
Max. Circum. Speed : 6.3-14m/sec  
Max. Viscosity : 5000mPas  
Protection Class : IP20

**RNV-500 Homogenizer** **RM 5390**



- Viscosity up to 10,000 mPas
- Continuously adjustable speeds for better results
- Triple safety of the drive, overload protection and smooth start – against jerky work, safety switch

Speed range : 10000-30000rpm  
Max. Circum. Speed : 22.7-36m/sec  
Working Volume : 10-40000ml (Optional) (ml, H<sub>2</sub>O)  
Protection Class : IP20

**Vacuum Pump**



**Recirculating Chiller**





## Electronic Micro Pipette



- Enable fast, precise and comfortable pipetting
- Comprehensive range of liquid handling protocols with easy programming
- DC motor with build-in error control improves pipetting precision and provides more reliable results
- Efficient lithium-ion battery offers long runtime on each charge
- 9 speeds for aspiration and dispensing
- Autoclavable low part

### Single Channel Adjustable Pipettes

Volume Range	Increment $\mu$ l
0.5-10 $\mu$ l	0.01 $\mu$ l
5-50 $\mu$ l	0.1 $\mu$ l
30-300 $\mu$ l	1 $\mu$ l
100-1000 $\mu$ l	1 $\mu$ l
1000-5000 $\mu$ l	-

\* 8 and 12 channels are available from 0.5 to 1200  $\mu$ l.  
Please call us for pricing

## MicroPette Plus Autoclavable Pipette



### Single Channel Adjustable Volume

Volume Range	Increment $\mu$ l	Price (RM)
0.1-2.5 $\mu$ l	0.05 $\mu$ l	RM 532
5-10 $\mu$ l	0.1 $\mu$ l	RM 532
2-20 $\mu$ l	0.5 $\mu$ l	RM 532
5-50 $\mu$ l	0.5 $\mu$ l	RM 532
10-100 $\mu$ l	1 $\mu$ l	RM 532
20-200 $\mu$ l	1 $\mu$ l	RM 532
200-1000 $\mu$ l	5 $\mu$ l	RM 532
1000-5000 $\mu$ l	50 $\mu$ l	RM 532
2-10ml	0.1ml	RM 532



Fully autoclavable  
The MicroPette plus pipettes can be fully autoclaved and withstand steam sterilizes at 121°C, 1 atm for 20 minutes.

\* 8 and 12 channels are available from 0.5 to 1200  $\mu$ l.  
Please call us for pricing

## TopPette Mechanical Pipettes



Pipette Stand



RM 222

- Lightweight, ergonomic, low force design
- Digital display clearly reads volume setting
- Cover volume range of 0.1 $\mu$ l to 10ml
- Design helps avoid repetitive strain injuries
- Calibrated in accordance with ISO8655. Each pipette supplied with individual test certificate
- The low part is available for autoclaving

### Single-channel Adjustable Volume Pipettes

Volume Range	Increment $\mu$ l	Price (RM)
0.1-2.5 $\mu$ l	0.05 $\mu$ l	RM 479
5-10 $\mu$ l	0.1 $\mu$ l	RM 479
2-20 $\mu$ l	0.5 $\mu$ l	RM 479
5-50 $\mu$ l	0.5 $\mu$ l	RM 479
10-100 $\mu$ l	1 $\mu$ l	RM 479
20-200 $\mu$ l	1 $\mu$ l	RM 479
100-1000 $\mu$ l	5 $\mu$ l	RM 479
1000-5000 $\mu$ l	50 $\mu$ l	RM 479
2-10ml	0.1ml	RM 479

### Features for multi-channels

- 8 and 12 channel pipettes are available for standard 96-well plate
- Dispensing head rotates for optimum pipetting convenience
- Compound material tip cone design allows visual seal verification

### 8-channel Adjustable Volume Pipettes

Volume Range	Increment $\mu$ l	Price (RM)
0.5-10 $\mu$ l	0.1 $\mu$ l	RM 1250
5-50 $\mu$ l	0.5 $\mu$ l	RM 1250
50-300 $\mu$ l	5 $\mu$ l	RM 1250

### 12-channel Adjustable Volume Pipettes

Volume Range	Increment $\mu$ l	Price (RM)
0.5-10 $\mu$ l	0.1 $\mu$ l	RM 1308
5-50 $\mu$ l	0.5 $\mu$ l	RM 1308
50-300 $\mu$ l	5 $\mu$ l	RM 1308

RM 248

## Repetitive Pipette

RM 1203



Dispensing Volume  
Select Suitable Tips

Sel. Tips	1	2	3	4	5
0.05ml	1 $\mu$ l	2 $\mu$ l	3 $\mu$ l	4 $\mu$ l	5 $\mu$ l
0.50ml	10 $\mu$ l	20 $\mu$ l	30 $\mu$ l	40 $\mu$ l	50 $\mu$ l
1.25ml	25 $\mu$ l	50 $\mu$ l	75 $\mu$ l	100 $\mu$ l	125 $\mu$ l
2.50ml	50 $\mu$ l	100 $\mu$ l	150 $\mu$ l	200 $\mu$ l	250 $\mu$ l
5.00ml	100 $\mu$ l	200 $\mu$ l	300 $\mu$ l	400 $\mu$ l	500 $\mu$ l
12.50ml	250 $\mu$ l	500 $\mu$ l	750 $\mu$ l	1000 $\mu$ l	1250 $\mu$ l
25.00ml	500 $\mu$ l	1000 $\mu$ l	1500 $\mu$ l	2000 $\mu$ l	2500 $\mu$ l
50.00ml	1000 $\mu$ l	2000 $\mu$ l	3000 $\mu$ l	4000 $\mu$ l	5000 $\mu$ l
Steps	48	23	15	11	8

Step

.....

## Motorized Pipette Filler

RM 1174



- Full volume range of 0.1-100ml
- Easy to one-handed operation (with just two buttons)
- Lightweight, ergonomic designs allow longer, fatigue-free pipetting
- Efficient lithium-ion battery offers long runtime on each charge
- Low battery alert
- Supplied with integral but replaceable 0.45  $\mu$ m filter
- Large LCD display provides visual confirmation of remaining battery charge and speed settings
- Eight speeds are available for aspirate and dispense liquid

## Bottle-top Dispenser

- Excellent chemical resistance
- Fully autoclavable at 121°C
- Made of PTFE, FEP, BSG, PP



Volume Range ml	Price (RM)
0.5-5	RM 1116
1.0-10	RM 1116
2.5-2.5	RM 1349
5.0-50	RM 1349

## Pipette Controller

RM 219

- Comfortable and simple to use
- Precise pipetting control
- 0.1-100ml volumetric or serological pipettes can be used
- Filling and delivery are easily controlled with a small sensitive lever
- Uses integral and replaceable 3 $\mu$ m filter
- Easy to maintain and clean
- Autoclavable silicone pipette holder



## Pipette Tips



### Pipette Tips (Non-sterilizing packing)

Description	Price (RM)
FT10 $\mu$ l (1pc, 1000 tips/bag)	RM 169
FT200 $\mu$ l (1pc, 1000 tips/bag)	RM 169
FT1000 $\mu$ l (1pc, 500 tips/bag)	RM 169
FT5000 $\mu$ l (1pc, 100 tips/bag)	RM 199



MERIPURE believe in offering high quality lab water purification systems and laboratory filtration products. Meripure also has a wide range of economical replacement consumables parts that is targeted for Millipore and others. Our mission is to become a leading solution provider for purification-based technologies products used generally in all R & D laboratories and manufacturers in the fields of life science, biotechnology, food and beverage, pharmaceuticals and more.

## Direct-Pure UP Water System



### Direct-Pure MRP-UP10 RM 18,343

Feed : Tap Water  
Output : RO and Type I ultrapure water

- The fully automated control system contains prefiltration system, RO membrane fouling preventing flush, RO membrane and cartridge life monitoring as well as many other programs for convenient operation.
- Two sets of dual-column purification cartridges work sequentially to ensure fully removal of ions and organics in water
- The system recirculates automatically every hour to prevent microbial from growing
- Equipped with a 30-liter PE tank with a liquid level sensor (ungradable to a 60-liter)
- A 0.2 µm final filter or millipore ultrafiltration filter (optional) removes final contaminants

Water production rate  
Ultrapure water (Type1) : 1.5 L/min (at 25°C)  
RO water : 10 L/h (at 25°C)  
Resistivity : 18.2 MΩ . cm at 25°C  
TOC\*\* : < 10 ppb (<5 ppb with a dual wavelength UV lamp)  
Microorganisms : <1 cfu/ml (with a 0.2µm final filter)  
Feed water pressure : 15 - 60 PSI (1 - 4 barr)

-Quality of ultrapure water meets or exceeds ASTM, CLSI, CAP and ISO Type 1 water standards.

## Large Direct-Pure EDI Water Systems



### Direct Pure Water System : MRP- EDI30 RM 35,536

Feed : Tap Water  
Output : Type II pure water

- The System is designed for users who need 400 to 1800 liters of Type II water per day.
- The system incorporates the best in class Siemens EDI module to deliver high quality Type II water consistently at relatively lower cost directly from tap H<sub>2</sub>O.
- Automatic water quality control programs ensure EDI product water meeting or exceeding Type II water requirements. (quality standards of ASTM, CAP, CLSI, ISO)
- The fully automated control system contains pre-rinse, RO membrane fouling preventing flush, RO membrane life monitoring as well as many other programs for convenient operation.

#### Main Application

- Preparation of bio-reagents, culture media
- Preparation of solution for chemical analysis such as HPLC and ICP
- For clinical analyzers
- Feed water for ultrapure water systems
- Medical device and equipment

Product Water Flow Rate : Typically 30 L/H (at 25°C)  
Type II water Quality  
Resistivity : >5 MΩ.cm @ 25 °C (typically > 10 MΩ.cm @ 25°C)  
TOC : <30 ppb  
Particle (>0.2 µm) : <1/ml (with a 0.2µm final filter)  
Microorganisms : < 1cfu/ml (with a 0.2µm final filter)  
Pyrogens (endotoxins) : < 0.001Eu/ml (with a terminal ultrafiltration cartridge)  
Feed water pressure : 30 - 90 PSI (2 - 6 barr)

## Direct-Pure RO Water Systems



Feed : Tap Water  
Output : RO water

- The Fully automated control system contains prefiltration system, RO membrane fouling preventing flush, RO membrane life detection as well as many other programs for convenient operation
- Equipped with a 30-liter PE tank with a liquid level sensor (upgradeable to a 60-liter).

#### Main Application

- Manual cleaning and glassware rinsing
- Buffer preparation
- Water baths
- Aging tester
- Autoclave
- Laboratory animal feed
- Feed water for ultrapure water systems

Product Water Flow Rate : 10 L/h at 25°C  
Bacteria and Particles removal : >99%  
Feed water pressure : 15 - 60 PSI (1 - 4 barr)

### Direct-Pure MRP-RO10 RM 14,810

## MERIPURIST Ultrapure Water Systems



Feed : Purified water (RO or distilled water)  
Output : Type I ultrapure water  
- Automatic system recirculation every hour to prevent bacteria from growing inside system  
- A dual UV lamp to kill bacteria and reduce organics to trace level  
- The patented U-Pack Ultra Filtration Cartridge ensures the produce water meets or exceeds NCCLS and CAP Type 1 water standard  
- Alarm and maintenance info on a large color LCD monitor

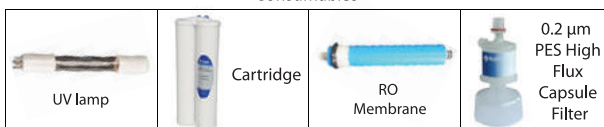
#### Main Applications:

- Preparation/dilution of HPLC mobile phases, blanks, sample and buffers in GC, HPLC, AA, ICP-MS and other advanced analytical techniques.
- Preparation of media for mammalian cell culture, IVF, reagents for molecular biology applications.

### RM 15,102

Product Water Flow Rate : 1- 1.5 L/min at 25°C  
Resistivity : 18.2 MΩ.cm at 25 °C  
TOC\* : <10 ppb (<5ppb with a dual wavelength UV lamp)  
Microorganisms : <1 cfu/ml (with a 0.2 µm final filter)  
Feed water pressure : 0 - 30 PSI (0 - 2barr)

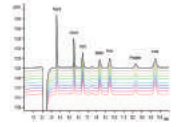
#### Consumables



Consumables products that comparable to Millipore are available.

#### Filtration Products





**Compact High Performance Single Beam UV/VIS Spectrophotometer with a Fixed 2nm Spectral Bandwidth (Model T60U)**



T60U (UV-Visible)  
Optical System : Single Beam  
Scan Speed : Selectable  
Wavelength Range : 190-1100nm  
Wavelength Accuracy : ± 1 nm  
Spectral Bandwidth : 2 nm

- Robust modular design with a small footprint.
- Shell is made from an environmentally friendly non corrosive material, cleanable and rugged
- High quality optical components ensure reliable analytical data with low stray light achieved using very low noise electronic circuits.
- Easily upgraded to include quantitative analysis multi wavelength spectrum & kinetics.
- Can be used with UV-WIN software (optional).
- Include 1 Pair of quartz cells, 1 Quantitative program card

**Double beam UV-VIS Spectrophotometer with Variable (0.5, 1, 2, 5nm) Spectral Bandwidth (Model T80+)**



T80+  
Optical System : Double Beam  
Scan Speed : Selectable  
Wavelength Range : 190-1100nm  
Wavelength Accuracy : ± 0.3nm  
Spectral Bandwidth : 0.5,1.0, 2.0, 5.0nm

- Simple mechanical structure and modular electronics make routine maintenance very easy.
- Analysis for photometric measurement, spectrum scans, quantitative determination and DNA/Protein analysis.
- UV-Win software gives additional functionality including 3D spectrum analysis and compliance with GLP protocol
- Include 1 Pair 10mm Quartz cells

**Recognitions and Testimonials from Customers**



Programmable temperature & humidity chamber and Xenon test chamber for an industrial customer



Hardening Furnace used by Inti University Nilai



150L Temperature and Humidity Chamber



**HITACHI**  
Inspire the Next

Hitachi Air Conditioning Products (M) Sdn. Bhd.  
Lot 10, Jalan Kemajuan, Bangi Industrial Estate,  
43650 Bandar Baru Bangi, Selangor Darul Ehsan, Malaysia.

12 October 2011  
Obsnap Instruments Sdn Bhd  
No 29A, Jalan SS 15/4C,  
47500 Subang Jaya,  
Selangor, Malaysia.


TO WHOM IT MAY CONCERN  
RE: LETTER OF APPRECIATION

It has been a real pleasure by choosing Obsnap Instrument Sdn Bhd as our testing and measuring supplier. The service engineer teams of Obsnap Instrument are very professional and responsible. For testing and measuring instrument, the most important part is after sales service support. We are very happy and satisfied with the good services that provided by Obsnap teams to us. The service teams of Obsnap go well beyond the normal call of duty. They always go the extra mile to minimize instrument downtime.

Thank you for their dedicated engineers and good service support and I strongly believe that choosing Obsnap Instrument was the right one.

Yours faithfully,  
  
Zamri B. Hashim  
Senior Engineer  
Quality Assurance Department

Hitachi Air Conditioning Products (M) Sdn. Bhd. (13340-7)  
Lot 10, Jalan Kemajuan, Bangi Industrial Estate, 43650 Bandar Baru Bangi, Selangor Darul Ehsan, Malaysia.  
Tel: 603-8925 9011 Fax: 603-8925 9011  
<http://www.hapm.hitachi-asia.com>




**WSA RESEARCH AND TESTING CENTER SDN. BHD.** (232590-D)  
Lot 1, Jalan Perusahaan Satu, Batu 17 Kawasan Perindustrian PKNS, 48000 Rawang,  
Selangor Darul Ehsan, Malaysia  
Tel. No: (603)60934699/6210  
Fax No: (603)60934700

Obsnap Instruments Sdn Bhd  
No 29A, Jalan SS 15/4C,  
47500 Subang Jaya,  
Selangor, Malaysia.  
22 March 2013

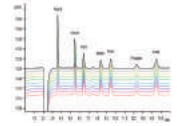
TO WHOM IT MAY CONCERN  
RE: Appreciation on Obsnap good service and support

Obsnap Instrument has supplied to us with few system machines like **MERIDIAN Walk-in Temperature and Humidity Chamber, Portable CMM, and Tensile Machine**. Obsnap's teams are very responsible and provide fast feedback when we need advises on the machines' operation and also at rectifying machine's problems. We've experience before that Obsnap's service teams were willing to stay until late night to trouble shoot one of the machines. We're satisfied with Obsnap's good quality maintenance service.

Besides, they also provide useful training, informative knowledge sharing to us, so that we get more familiar when operating the machines. We hope that they can maintain this kind of professionalism and supportive attitude for the sake of customer satisfaction to their service. Thanks for their sincere service and supports.

Yours faithfully,  
  
Mohamad Syafiq Mansor  
Senior Engineer  
WSA Engineering Sdn. Bhd./WSA RTC Sdn. Bhd.

WSA ENGINEERING SDN. BHD.  
Lot 23, Jalan RP 2,  
Taman Perindustrian Perindaha,  
00000 Rawang, Selangor Darul Ehsan  
Tel: 03-60932233 Fax: 03-60914711



**Extremely Compact and Portable Spectrophotometer P11**

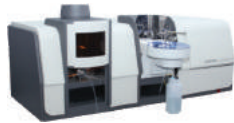


User Friendly Designed for Field Measurement and Laboratory Analysis

- 1.5kg weight allowing mobility and hand held operation.
- Analysis of Photometric, Spectral scanning, Kinetic and Quantitative measurement modes.
- Dynamic memory space for up to storage of 100 spectra or calibrations.
- RS-232 connectivity allows the transfer of measurement data to PC
- Good power management system with real time monitoring of battery voltage
- Include durable, industrial carry case and associated accessories

P11	
Optical System	: Array Based Spectrometer
Scan Speed	: > 4200nm/s
Wavelength Range	: 380-800nm
Wavelength Accuracy	: < 1.0nm
Spectral Bandwidth	: 4nm ± 1 nm

**Call us for details information!!!**



Atomic Absorption Spectrometer



Gas Chromatograph-Mass Spectrometry GC-MS



FTIR (Fourier Transforms Infrared Spectroscopy)



Gas Chromatography



Double channel Atomic Fluorescence Spectrometer



Sequential Inductively Coupled Plasma Emission Spectrometer



HPLC (High Performance Liquid Chromatography)

**NEW PRODUCT**

**Low Temperature Vacuum Drier Chamber**



The chamber is programmed to drying the product at a low temperature and maintain its original state. Boiling point goes around 15°C-20°C.

Model	SH-FVDO100	SH-FVDO200
Capa	70 – 100 kg	150 kg – 200 kg
Vacuum Pump	Oil Rotary (Two - Stage) 5 x10(-3) Torr	
Temp&Vacuum controller	Microprocess Digital Program Controller Touch Type	
Boiling Temp	15°C - 20°C	
Dimension Chamber(mm)	900 x 1220 x 1430 x 1Room	1000 x 2000 x 1430 x 1Room

**NEW PRODUCT**

**ECP - DRIER**  
Evaporating, Concentrating,  
Powderizing



Patent No. 10-0921177  
Patent No. 10-1155527



This equipment is common used to powderize Chinese Herb Decoction. The process of evaporation, concentration and powderization happens automatically, to get the powdered outcome from liquid state. It decreases the boiling point around 40°C-45°C by maintaining low pressure under vacuum, giving it the ability to dry Chinese Herb Decoction without destroying its original properties. Without grinding, powder outcome can be achieved easily.