

# Cool Solutions from LabTech

Water is one of the most precious resources. Still today water is commonly used as coolant in many laboratories, even if it is not a reliable element due to the varying temperatures. Most water that used as coolant is not recycled, leading to higher lab costs.

Combining operational excellence and technology expertise with an intimate understanding of customers' needs, LabTech offers a complete line of recirculating water chillers to match all laboratory needs. LabTech's state-of-the-art water chillers ensure accurate and constant cooling conditions for your instrumentation in the harsh environment of the laboratory.



## 7 good reasons to select LabTech advanced water chiller

### ■ High energy efficiency

"Hot gas bypass" technology routes back the hot, uncondensed refrigerant through a reservoir coil thus eliminating on/off cycling of compressors and the addition of energy-wasting heaters.

This method combined with P.I.D. temperature control technique allows accurate temperature control, greater energy efficiency, and increased compressor lifetime.

### ■ Accurate temperature control through PID technique

P.I.D. is a dynamic temperature control technique through proportional integrative and differential control.

### ■ Top level key parts ensure long lifespan

Most of the parts used in LabTech's chillers are from world-famous suppliers, and all parts must pass strict quality control.

### ■ Reduce operating cost

LabTech's recirculating chillers saves large amount of tap water, thereby reducing lab costs while saving precious resources of drinking water.

### ■ "Safe and Green lab conditions"

Intelligent alarm functions ensure safe working condition of your instrument.

The refrigerant that LabTech chiller using are compatible with international environmental standards.

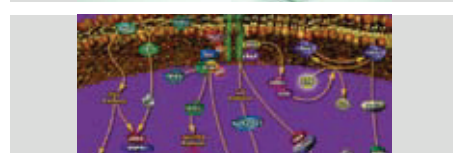
### ■ High performance and quiet operation

LabTech's chillers, ensure quiet operations and low water consumption while providing rapid and powerful cooling.

### ■ Best quality/price ratio in the market

## Fields of Application

Chemistry, Laser, Physics, Medicine, Material, Biology, etc.





# Recirculating Water Chiller



## Technology & Design

Every Labtech water chiller is provided with an electronic display to monitor and control the temperature via PID technology with a stability of  $\pm 0.1^{\circ}\text{C}$ . The liquid circuit pressure is monitored and controlled via an analogic pressure indicator. Furthermore every system is provided with a liquid level indicator for maximum safety of operations.

## Quality & Durability

The internal components of the Labtech water chillers line have been accurately selected and intensively tested by our R&D to guarantee maximum performance, reliability and long time of operations. Nevertheless Labtech has designed the water chiller line "S" to guarantee the minimum level of noise during operations, thus allowing installations directly in the laboratory next to the unit to be cooled. The design is created to simplify the service of the internal components in case of need.



## Versatilely & Easy to use

All Labtech water chillers are provided with 4 heavy duty casters for easy transportation inside the lab.

The units can be provided with control interface (optional) for any type of external device.

Every unit has built in drain to easily remove the liquid from the internal reservoir. Water connections are located on the rear side.

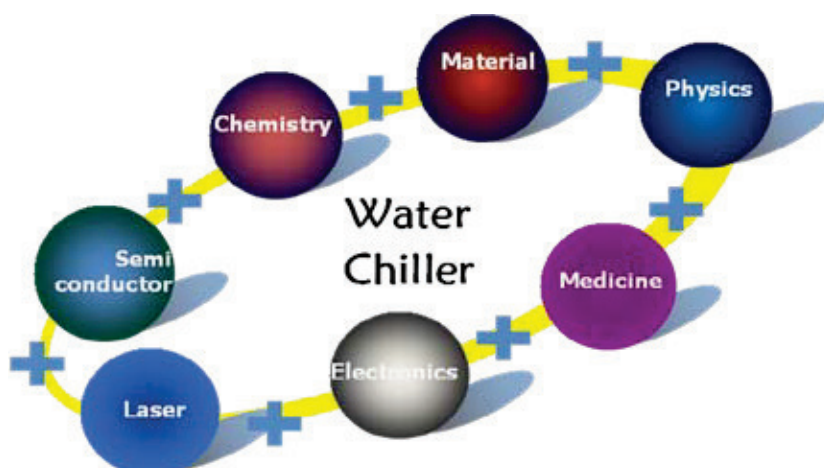
Simply connect and go!



## Specification

Model	H50-500	Smart H150-1000	Smart H150-1500	Smart H150-2100	Smart H150-3000	H150-5000	H150-7000	Smart H150-1000LT	Smart H150-2100LT
Temp. control range	-5℃~35℃	8℃~35℃						-20℃~35℃	
Temp. control mode	PID								
Cooling mode	Compressor cooling								
Temp. stability	±0.3℃	±0.1℃				±0.2℃		±0.1℃	
Refrigeration capacity @25℃	500W	1000W	1500W	2100W	3000W	5000W	7000W	1000W@25℃ 100W @-15℃	2100W@25℃ 200W @-15℃
Pump capacity	3.5L/Min	6.4L/min	6.4L/min	12.1L/min	12.1L/min	17.1L/min	17.1L/min	6.4L/min	12.1L/min
Max. Pressure	10Psi	60psi	60psi	60psi	60psi	60psi	60psi	60psi	60psi
Dimensions (LXWXHmm)	251x481x442	560x360x590	670x390x620	740x460x700	740x460x700	640x700x1100	640x700x1100	560x360x590	740x460x700

## LabTech Cool Solutions For All Applications



Series	Application	Model	P/N
H50 Series	Mini-laser, Rotary Evaporator, Reflux Extraction Apparatus, Fat Extractor, Kjeldahl, Distillator, Polarimeter	H50-500	LW500
SH150 Series	All types of AA, ICP*	SH150-1000	LW1000
	ICP*	SH150-1500	LW1500
	ICP-MS*	SH150-2100	LW2100
	ICP-MS*	SH150-3000	LW3000
	XRD,XRF*	H150-5000	LW5000
	XRD,XRF*	H150-7000	LW7000

\*To select the most suitable model of water chiller, please contact LabTech.

- Lasers
- Magnetic Resonance Imaging (MRI)
- Positron Emission Tomography (PET)
- X-Ray Apparatus
- Medical Electro Accelerator
- Thermal Analyzer
- Transmission Electron Microscope (TEM)
- Scan Electron Microscope (SEM)
- Focused Ion Beam (FIB)
- Material Testing Machine
- Chemical Vapor Deposition(CVD)
- Electron Discharge Machining (EDM)
- Physical Vapor Deposition (PVD)
- Plasma Etching system
- Electron-bombardment Welding
- Sputtering System
- Diffusion Pump
- Wet Etch
- Lithography
- ICP Etch/Ashing