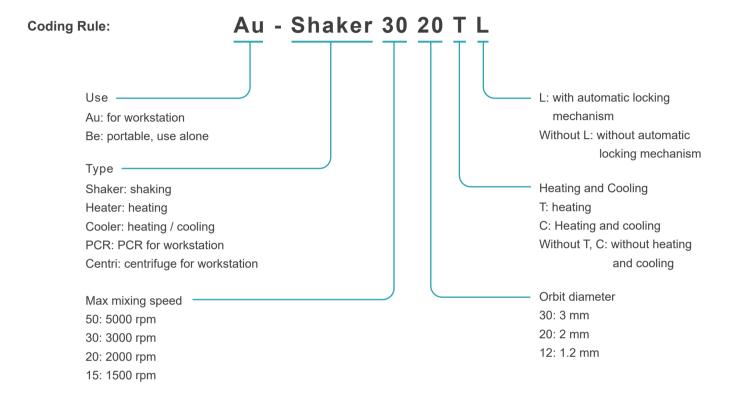


## **Laboratory Automation Products**

Laboratory automation products are specially designed for laboratory automation systems such as automatic liquid handling workstations, small and compact, with stylish design. They include heating, cooling, shaking, incubator, thermal cycling and PCR instruments. Each product (except PCR instrument) has its own display screen, which is easy to read programmed and measured parameters; it occupies a small area and can be used independently. We also provide customized solutions for specific applications!



#### **Model List:**

Туре	Heating	Heating / Cooling	Shaking & Automatic Locking	Shaking & Heating & Automatic Locking
Model	Au-Heater	Au-Cooler	Au-Shaker 5012L	Au-Shaker 3020TL
			Au-Shaker 3020L	

Туре	Shaking & Cooling & Automatic Locking	PCR Unit for Workstation	Centrifuge for Workstation
Model	Au-Shaker 1530CL	Au-PCR	Au-Centri

# Heating

Au-Heater dry baths for workstation (heating)

Au-Heater dry baths for workstation, suitable for heated dry baths in laboratory automation systems. It has its own display screen, which is easy to read programmed or measured parameters and can be used alone. It has a DB9 interface with CAN communication, which can be used for online communication with automation workstations of various manufacturers.











#### Specification

Model	Au-Heater
Temperature range	RT+5 °C~105 °C
Temperature setting	0.1 °C
Time setting	99 h59 min or 99 min59 s
Heat-up time [1]	RT+5 °C~ 95 °C ≤10 min
Temp. uniformity [2]	±0.5 °C
Temp. accuracy	±0.5 °C
Workstation use	DB9 port, CAN communication
Stand-alone use	Support
Input power	24 V DC, 120W
Signal line	2 m cable, controlled by workstation
Size / mm	142×105×77

### [1] The heating and cooling speed is related to the type of block. This indicator is tested in 0.5+1.5 mL block

Code	Product Description
AS-23020-00	Au-Heater dry baths for work- station (heating), with CAN
Suitable block	For details, refer to page 10

<sup>[2]</sup> According to different blocks, the temperature uniformity index is different

## **Heating & Cooling**

Au-Cooler dry baths for workstation (heating / cooling)

Au-Cooler dry baths for workstation is suitable for the heating / cooling dry baths of laboratory automation system. The instrument has its own display screen, which is easy to read programmed or measured parameters and can also be used alone; it has a DB9 interface with CAN communication, which can be used for online communication with automation workstations of various manufacturers.











#### **Specification**

Model	Au-Cooler
Temperature range	0 °C~105 °C
Temperature setting	0.1 °C
Time setting	99 h59 min or 99 min59 s
Cooling time [1]	95 °C~ RT ≤8 min
Cooling time [1]	RT~ 4 °C ≤8 min
Heat-up time [1]	RT~ 95 °C ≤8 min
Temp. uniformity [2]	±0.5 °C
Temp. accuracy	±0.5 °C
Workstation use	DB9 port, CAN communication
Stand-alone use	Support
Input power	24 V DC, 160 W
Signal line	2 m cable, controlled by workstation
Size / mm	142×105×82

#### [1] The heating and cooling speed is related to the type of block. This indicator is tested in 0.5+1.5 mL block

Code	Product Description
AS-23010-00	Au-Cooler dry baths for workstation (heating / cooling), with CAN
Suitable block	For details, refer to page 10

<sup>[2]</sup> According to different blocks, the temperature uniformity index is different

03

## **Shaking**

Au-Shaker 5012L / 3020L automatic locking shaker for workstation

Au-Shaker 5012L / 3020L automatic locking shaker, whose manipulator can easily grab and place the microplate, can locks the microplate and shakes it evenly.











Using for: 96-well, 384-well and 1536-well microplates, 0.5-2.5 mL deepwell plates, PCR plates and other working blocks

#### **■** Feature

- · Anti-vibration technology, 2D motion control
- High-precision zero positioning function (automatic centering and homing function)
- The microplate automatic edge locking and clamping function is convenient for the manipulator to hold the microplate
- Mixing orbit 2 mm and 1.2 mm are optional, corresponding max speed are 3000 rpm and 5000 rpm
  - · Au-Shaker 5012L is suitable for 384-well &1536-well microplates, etc.
  - · Au-Shaker 3020L is suitable for 96-well & 384-well microplates, 0.5-2.5 ml deepwell plates, PCR plates, etc.
- The shaker has its own display screen, which is easy to read programmed or measured parameters and can be used alone
- Can be fixedly installed on workstation, running more stably
- Blocks can be customized according to different applications

## **Process of Microplate Installation**



Toggle the handle on the back of the instrument

Place the microplate

**Finish** 

## Specification

Model	Au-Shaker 5012L	Au-Shaker 3020L
Speed / rpm	200~5000	200~3000
Mixing orbit / mm	1.2	2.0
Time setting	99 h59 min c	or 99 min59 s
Speed accuracy	±7.5	rpm
Acceleration time	1~10	) sec
Block locking method	Edge lock	
Zero positioning	Zero automatic positioning function	
Zero positioning time	1~10 sec	
Zero positioning accuracy	±0.1 mm	
Automatic locking	Automatic locking for easy gripping by manipulator	
Locking positioning accuracy	±0.1 mm	
Workstation use	Au series supports workstation use, DB9 port, CAN communication, and stand-alone use	
Input power	24 V DC,48 W	
Signal line	Au series shaker, 2 m cable, DB9 port, controlled by workstation	
Size / mm	142×105×94	

Code	Product Description
AS-23090-00	Au-Shaker 3020L automatic locking shaker for workstation, 24 V DC 48 W, with CAN communication
AS-23110-00	Au-Shaker 5012L automatic locking shaker for workstation, 24 V DC 48 W, with CAN communication
Suitable block	For details, refer to page 10

## **Shaking & Heating**

Au-Shaker 3020TL automatic locking thermo shaker incubator for workstation (heating)

Au-Shaker 3020TL automatic locking thermo shaker incubator for workstation (heating), whose manipulator can easily grab and place the microplate, can locks the microplate and shakes it evenly.



Using for: 96-well, 384-well microplates, 0.5-2.5 mL deepwell plates, PCR plates and other working blocks

#### **Feature**

- · Anti-vibration technology, 2D motion control
- The high-precision zero positioning function ensures the safe pipetting
- The microplate automatic edge locking and clamping function is convenient for the manipulator to hold the microplate
- Mixing orbit is 2 mm, and the corresponding max speed is 3000 rpm
- Temp. range: RT+5 °C~105 °C, good temperature uniformity
- · Has its own display screen, which is easy to read programmed or measured parameters and can be used alone
- Can be fixedly installed on workstation, running more stably
- Blocks can be customized according to different applications

## **■** Specification

Model	Au-Shaker 3020TL
Speed / rpm	3000
Mixing orbit / mm	2.0
Temperature range	RT+5 °C~105 °C
Temperature setting	0.1 °C increment
Heat-up time <sup>[1]</sup>	RT+5 °C~ 95 °C ≤10 min
Temp. uniformity [2]	±0.5 °C
Temp. accuracy	±0.5 °C
Time setting	99 h59 min or 99 min59 s
Speed accuracy	±7.5 rpm
Acceleration time	1~10 sec
Block locking method	Edge locking
Zero positioning function	Zero automatic positioning function
Zero positioning time	1~10 sec
Zero positioning accuracy	±0.1 mm
Automatic locking function	Automatic locking function is convenient for manipulators to grasp
Locking positioning accuracy	±0.1 mm
Workstation use	Au series supports workstation use, DB9 port, CAN communication or stand-alone use
Input power	24 V DC,120 W
Signal line	Au series shaker, 2 m cable, DB9 port, controlled by workstation
Size / mm	142×105×94

<sup>[1]</sup> The heating and cooling speed is related to the type of block. This indicator is tested in 0.5+1.5 mL block

Code	Product Description
AS-23150-00	Au-Shaker 3020TL automatic locking thermo shaker incubator for workstation (heating), 24 V DC 120 W, with CAN communication
Suitable block	For details, refer to page 10

<sup>[2]</sup> According to different blocks, the temperature uniformity index is different

## **Shaking & Heating, Cooling**

Au-Shaker 1530CL automatic locking thermo shaker incubator for workstation (heating / cooling)

Au-Shaker 1530CL automatic locking thermo shaker incubator for workstation (heating / cooling), whose manipulator can easily grab and place the microplate, can locks the microplate and shakes it evenly.











Using for: 96-well, 384-well microplates, 0.5-2.5 mL deepwell plates, PCR plates and other working blocks

#### **Feature**

- Anti-vibration technology, 2D motion control
- The high-precision zero positioning function ensures the safe pipetting
- The microplate automatic edge locking and clamping function is convenient for the manipulator to hold the microplate
- Mixing orbit 3 mm, corresponding max speed is 1500 rpm
- Temp. range: 0 °C~105 °C, good temperature uniformity
- · Has its own display screen, which is easy to read programmed or measured parameters and can be used alone
- Can be fixedly installed on workstation, running more stably
- · Blocks can be customized according to different applications

## Specification

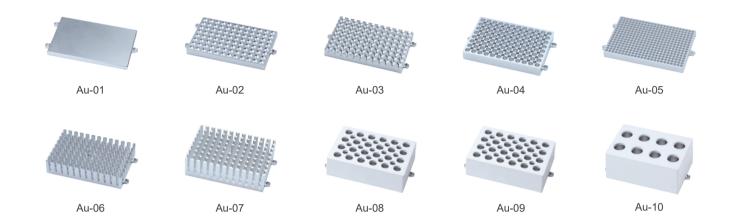
Model	Au-Shaker 1530CL
Speed / rpm	1500
Mixing orbit / mm	3.0
Temperature range	0 °C~105 °C
Temperature setting	0.1 °C increment
Heat-up time [1]	RT ~ 95 °C ≤7 min
Cooling speed [1]	95 °C ~ RT ≤7 min
Cooling speed [1]	RT ~ 4 °C ≤10 min
Temp. uniformity [2]	±0.5 °C
Temp. accuracy	±0.5 °C
Time setting	99 h59 min or 99 min59 s
Speed accuracy	±7.5 rpm
Acceleration time	1~10 sec
Block locking method	Edge locking
Zero positioning function	Zero automatic positioning function
Zero positioning time	1~10 sec
Zero positioning accuracy	±0.1 mm
Automatic locking function	Automatic locking function is convenient for manipulators to grasp
Locking positioning accuracy	±0.1 mm
Workstation use	Au series supports workstation use, DB9 port, CAN communication or stand-alone use
Input power	24 V DC,160 W
Signal line	Au series shaker, 2 m cable, DB9 port, controlled by workstation
Size / mm	142×110×110

<sup>[1]</sup> The heating and cooling speed is related to the type of block. This indicator is tested in 0.5+1.5 mL block

Code	Product Description
AS-23180-00	Au-Shaker1530CL automatic locking thermo shaker incubator for workstation (heating / cooling), 24 V DC 160 W, with CAN communication
Suitable block	For details, refer to page 10

<sup>[2]</sup> According to different blocks, the temperature uniformity index is different

## Suitable Blocks and Accessories



Code	Block	Description	Corresponding product maximum speed (RPM)		
			Au-Shaker 3020L	Au-Shaker 3020TL	Au-Shaker 5012L
AS-23011-01	Au-01	Adapt to flat bottom microplate	2500	2500	2800
AS-23011-02	Au-02	Adapt to 96-well round bottom microplate / deepwell plate	2500 / 1800	2500 / 1800	3000 / 2500
AS-23011-03	Au-03	Adapt to 96-well conical bottom deepwell plate	1800	1800	2500
AS-23011-04	Au-04	Adapt to 96*0.2 mL PCR plate	2000	2000	2500
AS-23011-05	Au-05	Adapt to 384*0.1 mL PCR plate	3000	3000	3000
AS-23011-06	Au-06	Adapt to DWP500 μL deepwell plate	1800	1800	2500
AS-23011-07	Au-07	Adapt to DWP1000 μL deepwell plate	1800	1800	2500
AS-23011-08	Au-08	Adapt to 24x1.5 mL+15x0.5 mL block	1800	1800	2500
AS-23011-09	Au-09	Adapt to 24x2.0 mL+15x0.5 mL block	1800	1800	2500
AS-23011-10	Au-10	Adapt to 8x5 mL block	1800	1800	2500

# Au-PCR 96 PCR for workstation

Au-PCR 96 for workstation is a compact PCR cycler suitable for laboratory automation systems. Freely programmable temperature process and thermo lid temperatures, can maintain excellent heating performance even with misaligned PCR plate reagent loads. It has good temperature uniformity, precise run times, ideal for use on liquid handling workstation.

#### **Feature**

- Use imported customized long-life Peltier block, cycle number is more than 1 million
- · Anodized aluminum blocks that retain fast thermal conductivity and corrosion
- Fast heating and cooling rate, the fastest heating and cooling rate is 5 °C/s, saving experimental time
- Motorized self-adaptive thermo lid, suitable for full-skirt and half-skirt 96-well PCR plates
- · Small size, linked through CAN communication port
- Automatic power-off protection, automatically execute the unfinished cycle after the power supply is restored, to ensure the safe operation of the whole process of amplification
- Support silicone thermo lid to meet a variety of experimental needs



#### Specification

#### Au-PCR 96 PCR for workstation

Applicable consumables	96 PCR plate
Application scenarios	For stand-alone PCR labs or pipetting workstations
Temperature range	Thermo lid: +30 °C~+120 °C Block: +4 °C~+99 °C
Default temp. of thermo lid	110 °C
Average heating rate	Block 50 °C~90 °C: ≥2.0 °C/s
Average cooling rate	Block 90 °C~50 °C: ≥2.2 °C/s
Temperature accuracy	≤±0.3 °C
Temp. control accuracy	≤0.2 °C
Temp. duration accuracy	≤±5 s

Temperature uniformity	≤0.7 °C
Power supply	AC100-240 V 50-60 HZ Max 800 W
Thermo lid clean	The thermo lid can be flipped for easy cleaning and disinfection
4 °C heat preservation	Infinity
Communication port	CAN
Controlling software	When connected to the workstation, it is controlled by the workstation; it can be controlled by the APP software when it is used alone
Weight	12 kg
Size (L×W×H)	277 ×162×165 mm

Code	Description	
AS-24010-00	Au-PCR 96, with CAN communication, AC 100-240 V / AC 800 W	
AS-24011-01	Au-PCR 96 power supply parts	

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