

## Easy-to-Read & Easy-to-Operate

## **New HICLAVE**

equipped with Color Touch Panel





ISO 13485 CERTIFIED
Products shown in this brochure
are manufactured by the company,
ISO 13485 certified.

STERILIZING
SIMPLY AND WELL

**HIRAYAMA** 

# HICLAVE HV- II series

Controlled medical devices (Class II) HV-25 II/50 II/85 II/110 II

For laboratories

HV-25 II LB/50 II LB/85 II LB/110 II LB









The user-friendliness has been enhanced by employing a color touch panel.

Various information is displayed in detail by using characters.

Reliability and safety are provided to users.

We offer the new model autoclaves: HICLAVE HV- II series autoclaves

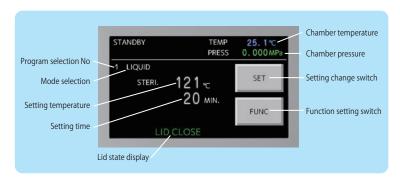


## Modest and simple design



## Easy-to-Operate with Color Touch panel —

A color touch panel allows an operator to select an operation screen at a glance.



### A mode selection is easy.

A mode selection is easy. Touch the screen to select a desired mode from five modes shown on the screen, then press the START button.



## A color screen is easy to read when setting temperature, time, warming or exhaust.

The setting change of temperature, time, warming or exhaust is easily carried out by means of touch operation while checking a color screen.

The setcontents are registered up to 8 patterns. It is convenient when sharing and utilizing them with other people.



Sterilization temperature setting



Program registration/selection

## Maintenance information is also displayed. Reliable & Safe!

Various information including settings, maintenance, safety or alarms is displayed on a color screen. Detailed contents are provided by the character information.



#### Maintenance information Notification of periodic self inspection, power failure, cycle count, etc. are displayed.



Alarm history
Date of generation, alarm contents, stage
ID number are displayed.



Alarms



System information Program version No., cycle count, next self inspection date are dsiplayed.



## Unique safety functions



### Electro-mechanical lid lock system

A lid is locked not by a handle but by a slide lever that can be lightly operated. So, opening / closing of a lid is easy and reliable. In addition, the pressure seal method consisting of an internal pressure type gasket and several lock pins which are inserted from the lid circumference is employed for safety.







## Pouble P

#### Dual interlock mechanism

The dual interlock mechanism which can lock a lid by detecting the chamber pressure and temperature during sterilization is installed. A lock state is maintained even when a cycle is interrupted by power failure or manual stop operation.

\*\*This interlock mechanism keeps operating even after a cycle is interrupted or manually stopped.



#### Lid lock release temperature

The lid lock release temperature can be set up for each mode or program, so safety at the time of unloading is secured.

LIQUID, AGAR, DISSOL modes:  $60 - 95^{\circ}$ C SOLID mode :  $60 - 97^{\circ}$ C

## Functions that support secure sterilization —

#### Dual sensing system for residual air

The residual air which may cause sterilization failure is dually detected to always maintain the sterilization conditions that are appropriate for loads.

\*\*Air removal is performed not only by gravity displacement but also by over-pressure exhaust, and the residual air is detected dually.

#### Exhaust level is selectable

It is possible to perform the fine exhaust by presetting an exhaust amount. The exhaust level is adjustable during operation.



### Forced cooling device (option)

At the end of sterilization, the chamber temperature is lowered using a forced cooling device (air cooling). It is possible to shorten time to unloading after sterilization.

## Functions that improve usability



#### Air removal time setting

The air removal time that is effective for sterilization of such objects as Durham tubes can be set.

HV-25 II/25 II LB, HV-50 II/50 II LB:

Arbitrary time between 3-9 minutes

HV-85 II /85 II LB, HV-110 II /110 II LB:

Arbitrary time between 6-18 minutes

### Memory function

A program which is set for each application can be registered up to 8 patterns.

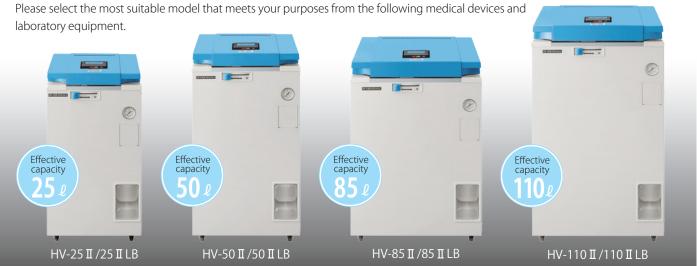
### Programmable auto-start function

The programmable auto-start function that starts an operation at the set time is provided.

### Boiling point setting

When it is not possible to use the equipment in standard settings in a place which is more than 800 m from the sea level, you can change a boiling point to use it.

## Maximum Effective Capacity : 110 $\ell$



		MD. Medical devices, Ebilot laborationes							
Product name		HICLAVE HV-I							
Model name		HV-25 <b>I</b>	HV-25 II LB	HV-50 Ⅱ	HV-50 II LB	HV-85 <b>I</b>	HV-85 II LB	HV-110 Ⅱ	HV-110 II LB
Classification of MD/LB		MD	LB	MD	LB	MD	LB	MD	LB
Chamber dimension		φ240 × D550 mm		φ300 ×D710 mm		φ420 ×D615 mm		φ420 ×D795 mm	
Chamber volume		28ℓ		54.2 ℓ		98.8 l		123.7 ℓ	
Effective capacity		25ℓ		50 ℓ		85 ℓ		110ℓ	
Temp. settings	Sterilization temperature	105 $\sim$ 126 $^{\circ}$ C variable					°C variable		
ηp. s	Dissolution temperature	60 ∼ 100°C variable							
ettir	Warming temperature	$45 \sim 60$ ℃ variable							
	Lid lock temperature	LIQUID, AGAR, DISSOL modes: $60 - 95^{\circ}$ C variable, SOLID, WASTE modes: $60 - 97^{\circ}$ C variable $\%$							
Time settings	Sterilization timer	1 – 250 min, The remaining time is displayed.							
e se	Dissolution timer	1 – 60 min, The remaining time is displayed.							
#	Auto-start timer	1 min later – 1 week later, A start date and time is set.							
ର୍ଭ Air removal time			3 – 9 min			6 – 18 min variable			
Mode selection		LIQUID, SOLID, WASTE, AGAR, DISSOL/ 8 programs							
Exhaust settings		3 steps (No exhaust, Fine exhaust, Small amount of exhaust)							
Maximum working pressure		0.186	-	0.255MPa					
Thermometer		Digital disaply $5.0 \sim 128.9^{\circ}$ Digital disaply $5.0 \sim 137.9^{\circ}$							
Pressure gauge		Digital display 0-0.3 MPa/Analog display 0-0.4 MPa							
Safety devices and alarms		Safety pressure valve, Earth leakage breaker with O.C.protection, Low water cut off device, Alarms: Low water heating, Temperature sensor wire disconnection, Over-temperature, Over-cool, Over-pressure, Abnormality in lid, Abnormality in the lock of lid opening/closing lever							
Outside dimension (in mm)		W485×D470×H949		W547×D532×H1046		W667×D652×H1026		W667×D652×H1206	
Weight (approx.)		44 kg		60 kg		83 kg		89 kg	
Pressure vessel category		Simple pressure vessel Small sized pressure vessel							
Chamber material		Stainless steel (SUS 304)							
Power souree		А	C110/120/220/2 (specify voltage	30/240V, 50/60Hz when ordering)		AC220/230/240V, 50/60Hz (specify voltage when ordering)			
Power consumption		1.5kW		2.0kW		3.0kW		4.0kW	
Power cord connection		Plug with ground terminal pin Ring terminal (A plug is not supplied.)							
Supplied accessories		Wire basket, Exhaust bottle, Bottom plate, Drainage hose (50 cm), Exhaust hose (50 cm), Drainage collecting bottle, Cable tie, Caster stopper, Operation manual, User inspection procedure, Small sized pressure vessel specifications (excluding HV-25 II and HV-25 II LB)							
	dical device certification nber 229AABZX00056000	0	_	0	_	0	_	0	_
Controlled medical devices (Class II )		0	_	0	_	0	_	0	_
Controlled medical devices requiring special maintenance		0		0	_	0	_	0	_
JIS C 1806-1:2010		0	_	0	_	0	_	0	_

<sup>\*</sup> The upper limit value changes according to the set boiling point.

#### Optional devices for upgrading a system



Recorder / Printer for data collection



Floating sensor A sterilization timer is activated after the material to be sterilized reaches the set temperature



Forced cooling device (air cooling) Time to unloading after sterilization is shortened.





Automatic water supply system Water is automatically supplied without troublesome water supply work.



USB interface port

· Software available

#### Optional accessories



Round wire basket Stainless steel



Sterilization bucket Stainless steel



Round wire basket with bottom plate Stainless steel



Special sterilization bucket for medical wastes treatment



Deodorizer for autoclaves



Detergent for autoclaves

• Sterilization tape, label, bag, etc. Ask us for details

 $Specifications \ and \ appearance \ are \ subject \ to \ change \ without \ notice \ due \ to \ continuous \ product \ improvement.$ 

Manufacturer:

Manufacturing Corp.

Overseas Sales Dept.

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