

Personal Organic Synthesizer ChemiStation™

PPV-5460

Suitable for low temperature, reflux & distillation experiments.

-27°C ~ 200°C, 4 independent temperature control reactors.

Development of new reaction process, new catalytic substances, sample synthesis, building block synthesis, polymerization reaction can be carried out effectively.



PPV-5460

Features

- Reaction vessels of different diameter can be mounted by changing test tube adapter. The unit provides possibility of synthesis experiment with wide scale of 11 ~ 150mL. Combination of glass or stainless reaction vessels is feasible.
- Temperature sensor and temperature controller are equipped with 4 heating blocks; each block operation independently controlled.
- Constant flow of cooling water prevents excessive synthesis reaction.
- Strong ferro-magnetic stirrer provides strong and stable stirring. One motor, four shafts system ensures stable rotation from low to high speed.

Specifications

Product name	Personal Organic Synthesizer
Model	PPV-5460
Cat. No.	254870
Stirring	Strong magnetic stirrer
Reaction vessel	1~4
Synthesis scale	11~150mL
Temp. control range	-27~200°C
Temp. control accuracy	±0.5°C
Rotation speed	50~900 rpm (water)
Temp. setting & display	Sheet key input, digital display (-40~200°C)
Gas replacement	Vacuuming + inert gas
Reflux	Dimroth condenser
Reagent injection	Pipett, syringe, dripping funnel
Observation window	Slit in front of aluminum block (with light)
Safety features	Leakage·overcurrent braker, Fuse, Self diagnosis, Double chamber, Drip tray Defrost heater, Motor overload protector
Dimensions (mm) & weight	475W x 383D x 290H 26kg
Power source	1.3kVA AC100V

Point!

By changing size and kind of reaction vessels, diversified systems will be available



Standard
φ60
reaction vessel

Branched test tube
Separable flask
3·4 port reaction vessel
Pressure vessel

+

Drip preventive cover
Test tube adapter

By adding optional test tube adapter, different size and kind of reaction vessels can be mounted. 10 selections available for combination of glass reaction vessel and stainless pressure vessel.

Rotary Evaporator

1

Vacuum Pump & Aspirator

2

Organic Synthesizer

3

Freeze Drier / Spray Drier

4

Shaker

5

Stirrer

6

Tube Pump

7

Low Temperature Circulator

8

Cold Trap

9

Constant Temperature Bath

10

Incubator

11

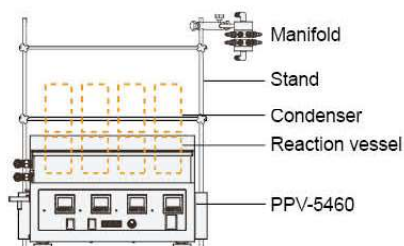
Oven

12

Fermentor

13

System composition

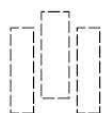


● **Manifold**
Used for cold water circulation, vacuuming and inert gas distribution.

● **Condenser**
Used for reflux of evaporated vapor when using glass reaction vessel.

● **Stand**
Support manifold and provides clamp function for max. 4 condenser.

● **On-head parts:**
Used with pressure vessel to confirm reaction gas injection, purging and inner pressure. Relief valve is provided to avoid over pressure.



Condenser
On-head

On-head
for pressure vessel

Ultra small condenser
Small condenser
Dimroth condenser

On-head for
pressure vessel



Reaction vessel
• Test tube with branch
• Separable flask
• Reaction vessel
• Pressure vessel

11 · 14 mL
pressure vessel

30 · 50 mL
Test tube
with branch

50 mL · 100 mL
Separable flask

150 mL
Separable flask

150 mL
Reaction vessel

63 mL
Reaction vessel



Drip cover

φ30

φ34

φ38

φ50

Standard φ60



Test tube adapter

φ30

φ34

φ38

φ50



Parts related to reaction vessels

No.	Product name	Specifications	Model	Cat. No.
①	Branched reaction vessel	30mL φ30	—	212760
②		50mL φ34	—	217160
③	Small separable flask set	50mL (6 port) φ38	—	248810
④		100mL (6 port) φ50	—	248820
⑤		150mL (3 port) φ60	—	251070
⑥		150mL (4 port) φ60	—	251080
⑦	Reaction vessel (3 port)	150mL φ60	—	228040
⑧	Reaction vessel (4 port)	150mL φ60	—	228050
⑨	Pressure vessel (with impeller)	14mL φ30	HIP-30	218290
⑩		11mL φ30	HIP-30L	228190
⑪		63mL φ60	HIP-60	218310
⑫	Small condenser	NS14 / 23	—	240120
⑬	Multi-adapter	NS14 / 23 2 port	—	228080
⑭	On-head part (-100/0/2400kPa)	—	HIP-HEAD2	248400
⑯	Teflon impeller (Football type)	30·50mL	TFS-20	200290
—		30·50·100mL	TFS-25	200300
—		150mL	TFS-35	200320
⑰	Flask cover (150mL)	3 port	—	251040
⑱		4 port	—	251050
⑳	Vessel part (150mL)	—	—	251060
—	Separable clamp	—	Y-SK-13	116500
—	Separable seal packing	—	—	262430

Options

No.	Product name	Model	Cat. No.
15	Test tube adapter	φ30	—
		φ34	—
		φ38	—
		φ50	—
17	Drip cover	φ30	—
		φ34	—
		φ38	—
		φ50	—
18	Stand unit	—	228150
—	Manifold	PPV-34M	228110