

EYELA

ProcessStation PPV-3400 series is personal and economic system that is able to perform reaction under wide temperature range and ramp temp. control.

New

Personal Organic Synthesizer ProcessStation

PPV-3400 Series

It is ideal for evaluation for hydrogenation, carbonylation and polymerization for pharmaceuticals, agricultural intermediates, polymers and fine chemicals.

- Wide temp. control range of -27°C ~ 200°C
- 4 independent temperature control
- Ramp temperature control
- Synthesis scale 10 - 30mL, 50 - 150mL
- Wide variety of glass vessels and condensers



TOKYO RIKAKIKAI CO., LTD.

PPV-3430•3460•3461 Series

ProcessStation PPV-3400 series is able to perform cold temperature, reflux and evaporation experiment. Discovery of new reaction, development of new catalyst, synthesis of different materials, can be implemented utilizing the feature of four independent temperature control and variety of glass vessels and condensers.

Ramp temperature control and LED light for reaction status observation are also available.



PPV-3461

Features of PPV-3400 Series



High-efficiency independent temperature controller

4 temperature sensors and temperature controllers are equipped for each four heating blocks.

Range of temperature setting is from -27.0°C to 200.0°C . Heating and cooling can be controlled simultaneously (Pat.) Accurate temperature control can be performed even around room temperature ($\pm 0.5^{\circ}\text{C}$) and temperature fall can be executed smoothly as well.

After having reaction in high temperature, the block can be cooled speedy if the temperature control is stopped, which prevents over-reaction.



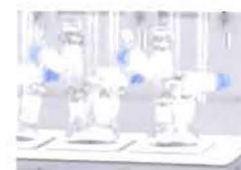
Cold temperature experiment

Experiment from as low as -27°C is possible. It is effective for synthesis of active compounds like drug and medicine. Heat insulation part of the device is equipped with defrost heater, dew receiving tray and dew water exhaust drain.



Strong reflux

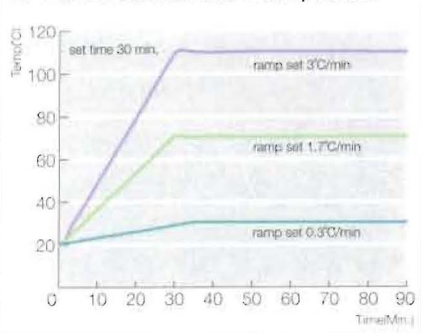
By connecting Dimroth condenser, strong and efficient reflux experiment is possible.



Gas purge and sample injection

By using 3-way cock or manifold, reagent injection, sampling is possible under inert gas condition.

PPV-3400 Aluminum block temperature



Ramp temperature control

Temperature can be raised or fallen at constant speed to preset temperature.

*Temperature raise control: slowly raise temperature to the point where reaction starts

*Temperature fall control: can slowly cool down due to crystallization



Ferromagnetic stirrer



Compact stirrer

Powerful stirring

Ferromagnetic stirrer

Strong and stable vortex stirring can be executed by a powerful stirrer, making it possible to efficiently stir highly viscous liquids.

Compact stirrer

Compact stirrer CPS-1000 (Option) is an overhanging type stirrer exclusively designed for organic synthesizers. Because plural units can be used in parallel, it is convenient for the polymerization reaction, the stirring of crystal and small volume sample.



Easy to use reaction vessel

Three port or four port vessels are available. Large port diameter makes sample injection easy. By combination of variety of vessels, system expansion is also feasible.

Optional Accessories



Stand unit

By installing stand unit, you can mount different glassware and condenser according to experimental requirement.

Product No.: 228150

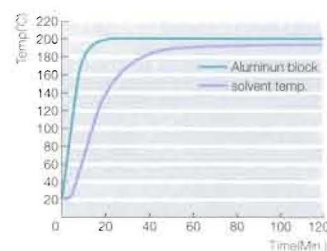
Temperature recording



Portable multi-logger ZR-RX20A
Prod. Code:227250

Aluminum block is provided with inlet for chemical thermocouple. Optional portable multi-logger and chemical thermocouple enable to record solvent and aluminum block temperatures during reaction.

PPV-3400 Aluminum block temperatur

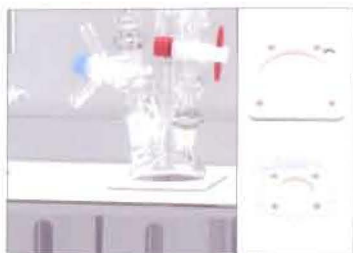


Parts for PPV-3400 Series



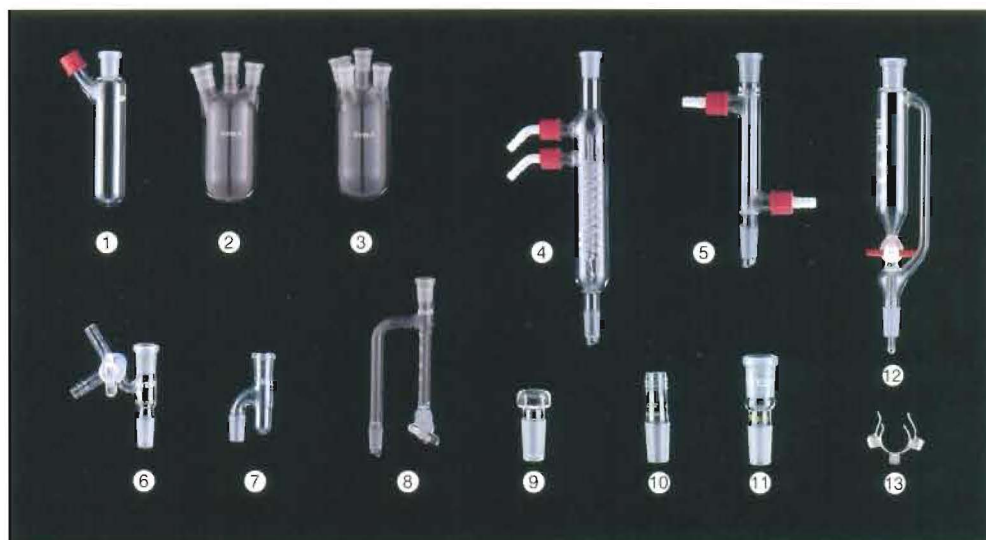
Observation slit with LED light

Reaction status (color, reaction status, stirring etc.,) can be observed through slit of front side of aluminum block. LED light ensures clear view.



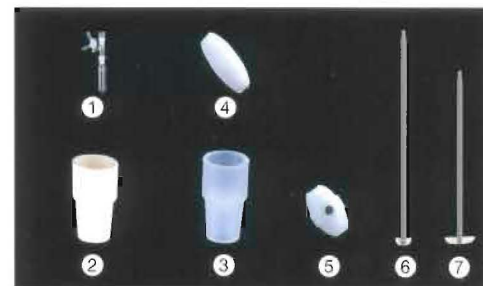
Teflon shutter and dew prevention cover

The device is equipped with dew prevention teflon shutter and cover. It prevents dew in aluminum block.



Reaction vessels, condenser, cooling hose

Product name	Catalog. No
① Standard reaction vessel(ø30 NS14/23 GL14)	212760
② Three port reaction vessel(ø60 grind:NS14/23 side:NS14x1 NS19x1)	228040
③ Four port reaction vessel(ø60 grind:NS14/23 side:NS14x2 NS19x1)	228050
④ Dimroth condenser NS14/23 GL14	212780
⑤ Liebig condenser L100 NS14/23 GL14	217200
Silicone hose (for manifold, 5m)	212790
Cooling hose set (silicone ø9x1m, 2pcs) CT-1S	194050
Cooling hose set (silicone ø9x2m, 2pcs) CT-2S	201830

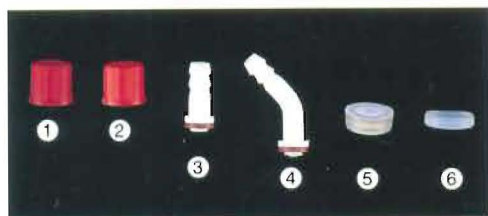


Septa, stirring bar, stirring seal, impeller

Product name	Catalog. No
① Spa seal (silicone, for GL14) (10pcs)	212700
② Septum (natural rubber, for NS14) (10pcs)	218420
③ Septum (silicone, for NS14) (10pcs)	218410
Septum (natural rubber, for TS15) (10pcs)	218430
Septum (silicone, for TS15) (10pcs)	195710
④ Teflon stirring bar (football type, ø15x25L 5pcs) TFS-25	200300
Stirring bar (football type, ø15x35L 5pcs) TFS-35	200320
⑤ Teflon powerfulmagnetic stirring bar (oval type, 1pce) ST-2F	213110
Teflon powerfulmagnetic stirring bar (football type, ø16x35L 1pce)	203660
Stirring seal (for NS14)	228120
⑥ Impeller (ø30, PPS&PTFE)	228140
⑦ Impeller (ø60, PPS&PTFE)	228130
Dew prevention cover (ø30)	228020
Dew prevention cover (ø60)	228010

NS14/23 Parts

Product name	Catalog. No
⑥ Injection port with 3-way cock (NS14/23)	217190
⑦ Dean-stark trap (small NS14/23)	212770
⑧ Dean-stark trap (5mL with cock NS14/23)	228060
⑨ Stopper NS14/23 with hexagonal plate (10pcs)	217290
Stopper NS/26 hexagonal plate (10pcs)	228100
⑩ Screwthread GL14 NS14/23 (10pcs)	217220
⑪ Adapter with ground joint, upper TS15/25, lower NS14/23	217310
Multi-adapter (NS14/23 connection pipe)	228080
⑫ Dropping funnel 25mL NS14/23	217210
⑬ Keck conical joint, clip type NS14, TS15 metal (10pcs)	217300
Keck conical joint, clip type NS19 (10pcs)	228090



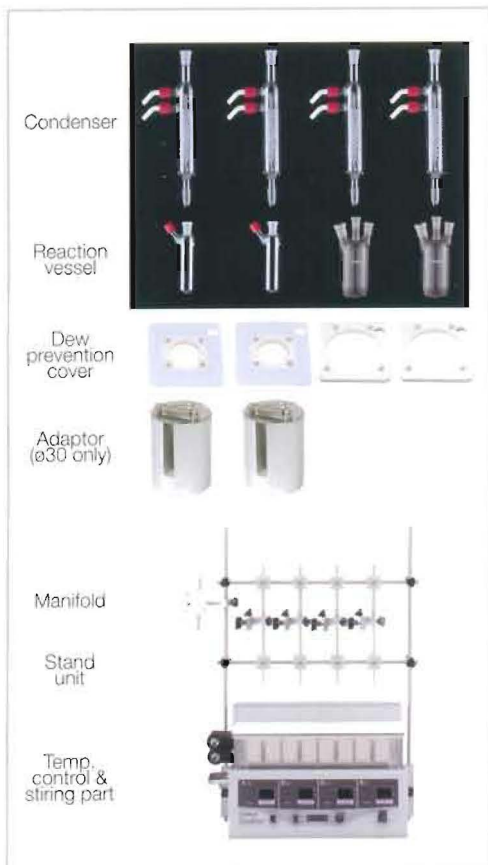
GL-14 Parts

Product name	Catalog. No
① Screw cap GL14 with opening for screwhead tubes (10pcs)	217230
② Screw cap GL14 for screwhead tubes PTFE (10pcs)	217240
③ Plastic hose connection, straight (10pcs)	217250
④ Plastic hose connection, bent (10pcs)	217260
⑤ Silicone rubber seals, septa (25pcs)	217280
⑥ Silicone rubber seals, with bore (10pcs)	217270

Specifications

Product name	Personal Organic Synthesizer ProcessStation								
	PPV3430			PPV3460			PPV3461		
Model name	PPV3430			PPV3460			PPV3461		
Product No.	229960	229969	229968	229970	229979	229978	229980	229989	229988
Voltage	100V	115V	220V	100V	115V	220V	100V	115V	220V
Reaction vessel	Branched			3 port			4 port		
Number of vessel	10-30mL 1-4pcs			50-150mL 1-4pcs			50-150mL 1-4pcs		
Stirring system	Ferromagnetic stirrer								
Temperature control range	-27~200°C (4xindependent control)								
Temperature control accuracy	±0.5°C								
Rotation speed range	50-900rpm (water 30mL)				50-900rpm (water 150mL)				
Setting temperature, display	Sheet key input, digital display (-40.0-200.0°C)								
Setting stirring, display	Volume setting, digital display (0-2000rpm)								
Reaction observation	Through slit on aluminum block with LED light								
Safety features	Leak/Over-current braker, Temp. fuse, Temperature controller self diagnosis function (Variable upper limit, fixed upper limit, sensor abnormal), Defrost heater, Double chamber, Dew receiving tray, Motor over-load protection								
Ambient temperature range	5 to 35°C								
Dimensions (mm)	475Wx383Dx290H (600H with Dimroth Condenser)								
Net weight	26kg								
Input power	1300VA								

Components of PPV-3400 Series



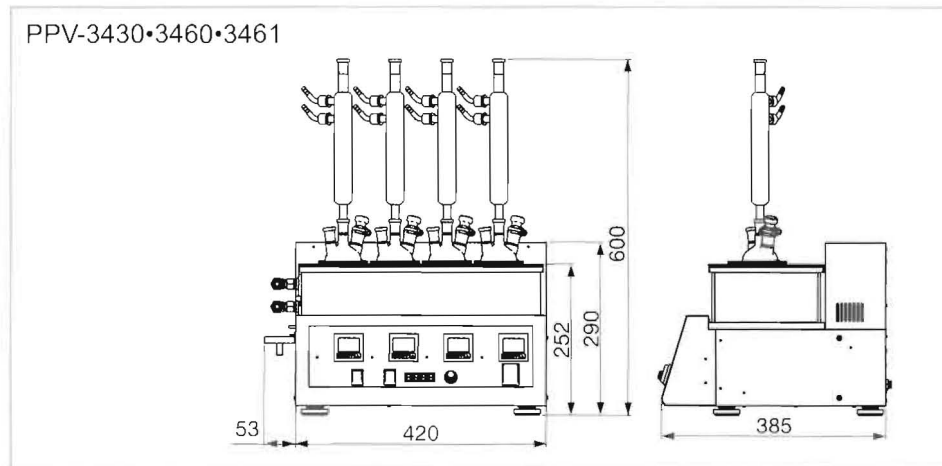
Configuration

Dimroth condenser	Prod. No. 212780x4		
Reaction vessel	Product No. 212760x4	Product No. 228040x4	Product No. 228050x4
Stirrer	TFS-25	TFS-35	
Dew prevention cover	Product No. 228020x4		
Test tube adapter	Product No. 227970x4	-	
Temperature control & stirring	PPV-CTRL 1 Product No. 227230		

Standard Accessories

Temp. control & stirring part	Ground adaptor (1), Power cord (1), L shape circulation nozzle (2) Isolation material for circulation nozzle (2), Binding band (4), Hose band (4), Dew receiving tray (1)
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PPV-3400 Series Dimensions (mm)



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<http://eyelaworld.com>

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