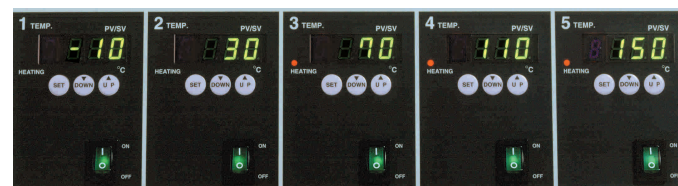


# Personal Organic Synthesizer Process Station PPS-3510

## \*Efficient, independent temperature controller



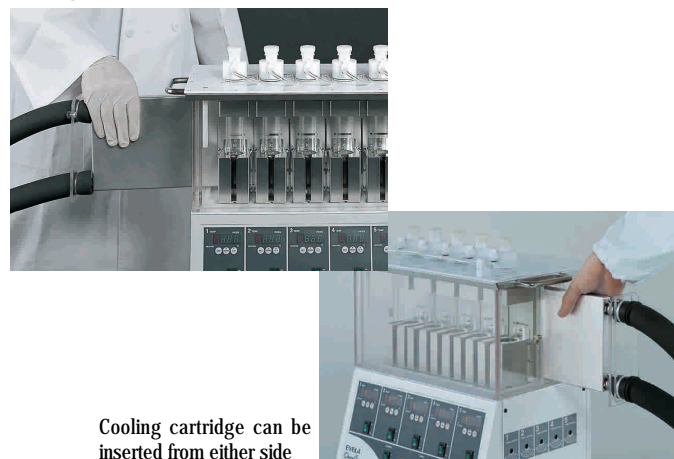
Corresponding to five heating blocks, each of five blocks is independently equipped with the temperature sensor and thermo regulator.

Each of the five blocks which are capable to control heating and cooling is able to control the temperature range independently from -10°C to 130°C.

It also realized a precise temperature control (\*0.5°C). It also features smooth temperature fall. When temperature control is stopped, high speed cooling is possible and prevents over reaction.

Different temperature setting between neighboring blocks is possible up to max. 150°C.

## \*Strong reflux

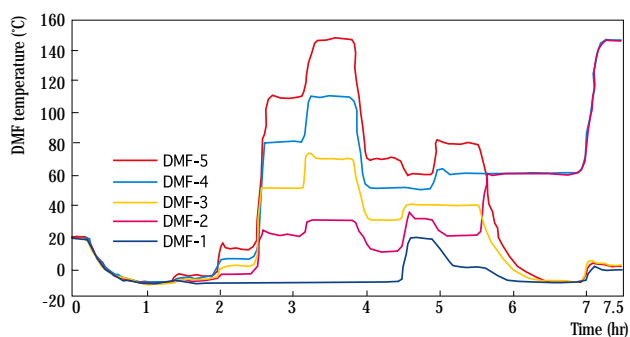


Cooling cartridge can be inserted from either side

## \*Solvent temperature data

PPS-2510: solvent 25mL x 5, 500rpm

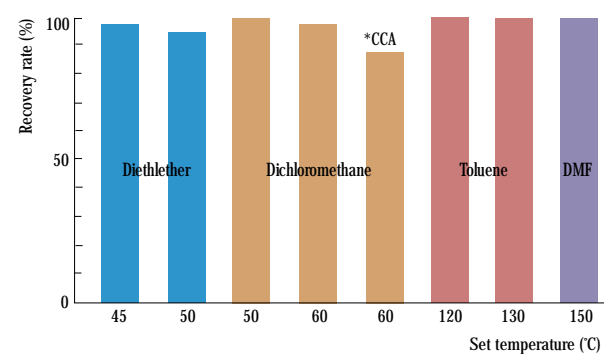
Cooling circulator: CA-1112(max. -20°C) Measured by Chemi-thermo monitoring unit



## \*Solvent reflux data

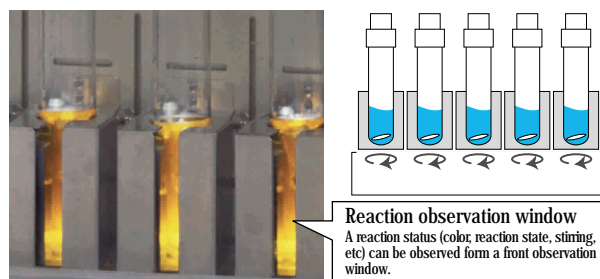
PPS-2510: Solvent volume 30mL, 500rpm, 4 hour

Cooling circulator: CA-1112(-20°C, \*CCA-1112)



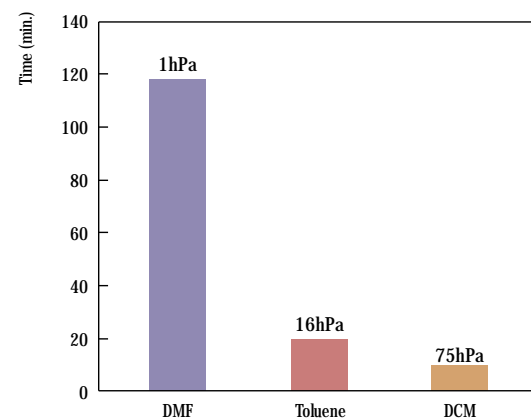
## \*Powerful stirrer

A strong ferromagnetic stirrer is equipped for each test tube and implements strong and smooth vortex mixing.



Reaction observation window  
A reaction status (color, reaction state, stirring, etc) can be observed from a front observation window.

## \*Concentration time (PPS-2510)



Solvent 30mL x 5  
Set temp. 30°C  
Total evaporation 125mL

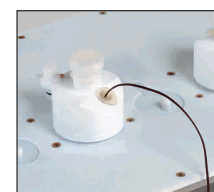


PPS-3510

## Operation of the temperature controller



The temperature can be set from -10°C to 150°C for each of the five heating blocks.

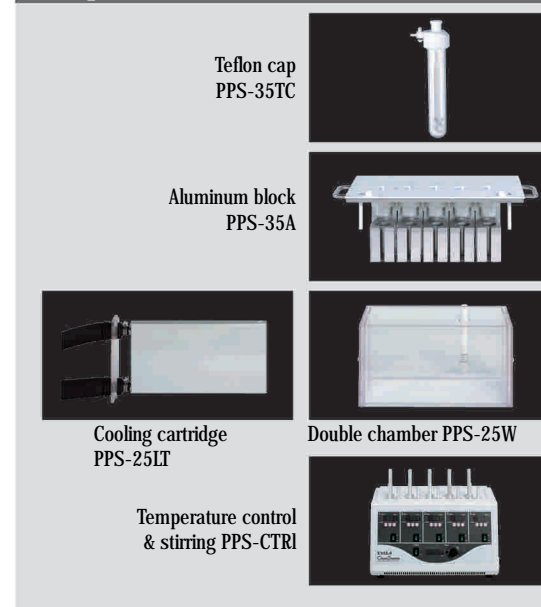


With thermo-couple inlet



With Teflon shutter

## Components



Teflon cap  
PPS-35TC

Aluminum block  
PPS-35A

Cooling cartridge  
PPS-25LT

Temperature control  
& stirring PPS-CTRL

Double chamber PPS-25W

PPS series is developed to improved the efficiency of the synthesis process.

Designed as a system with 5 independent reactors, each with its own temperature control, the system is time-saving and efficient. The relatively large vessel size is developed for users that work with larger amounts of sample volume and it is ideal for development, verification experiments, experiments for optimization and also for large volume intermediate synthesis. Five different temperatures can be set for five test tubes, saving time and performing efficient synthesis.

Refluxing, gas purging, heating, cooling, and stirring functions are all equipped as standard.

## Features

- The available number of vessel is max. 5 test tubes.
- Five heating positions enable to set 5 different temperatures. (-10°C to 130°C)
- The working volume of synthesis is 50-60mL x 5 positions
- Strong and stable vortex stirring can be executed by a powerful stirrer, making it possible to efficiently stir highly viscous liquids.

## Specifications

Product name		Personal Organic Synthesizer (Process Station)	
Model		PPS-3510	
Cat. No		210359	210358
Available number of reaction vessel	1 to 5 pcs		
Synthesis scale	50mL to 60mL (Variable)		
Stirring system	Ferromagnetic stirrer		
Performance	Temperature control range		
	-10°C to 130°C (5 x individual control)		
	Temperature control accuracy		
	±0.5°C		
	Stirring speed range		
	Approx. 250 to 1100rpm (at 60mL water volume)		
	Temperature setting & display		
	Membrane key pad input, digital display		
	Stirring speed setting & display		
	Volume input, digital display		
Functions	Gas substitution		
	Vacuum and gas injection (Executed in the vessel) <sup>3</sup>		
	Reflux		
	The cooling water-cooled aluminum reflux head provides efficient condensing and refluxing		
	Sample injection		
	Pipette, syringe, dripping funnel-under inert condition		
	Reaction observation		
	Through the slit of the aluminum block		
	Safety features		
	Double chamber, Fuse, Dew tray, Independent over heat protectors (5), Empty heating protector		
Specifications	Materials of sample contacting part		
	Borosilicate glass (DURAN), Teflon, Perfluoro		
	End connection of cooling water		
	OD 10.5mm hose end		
	Size of reaction tubes (mm)		
	ø35 x 200H (with rim)		
	Size of the magnetic stirring bars		
	ø25 x 8Hmm (cross bar)		
	Ground joint		
	TS 15/25		
	Ambient temperature		
	5°C to 35°C		
	Overall dimensions (mm)		
	465(W) x 310(D) x 475(H)		
	Weight		
	25kg		
Components	Power source		
	AC115V, 600VA, 50/60Hz		AC220V, 600VA, 50/60Hz
	Teflon caps		
	PPS-35TC Cat.No.210379		
	Aluminum block		
	PPS-35A Cat.No.210369		
	Double chamber		
	PPS-25W Cat.No.210399		
	Cooling cartridge		
	PPS-25LT Cat.No.210389		
	Temp. & Stirring control unit		PPS-CTRL (191769)
			PPS-CTRL (191768)

<sup>1</sup>. For each of the 5 heating blocks a different temperature can be set.

<sup>2</sup>. When conducting temperature control or reflux at room temperature or lower, the unit needs to be connected to a low temperature water circulator.

<sup>3</sup>. To purge inert gases, the Teflon caps (included as standard) are necessary.

## Standard Accessories

Teflon caps	Septum sealing (x 5), Three-way cock (x 2), Piping set
Aluminum block	Test tube (x 10), Stirrer (x 5)
Double chamber	—
Cooling cartridge	Cold insulation hose set (Silicone ø9 x 2m, 2pcs)
Temp. & Stirring control uni	Fuse (x 1), Earthing adapter (x 1)