

Heating / Vacuum/ Gas Flow/ Cooling Compact Stage Model S-84C

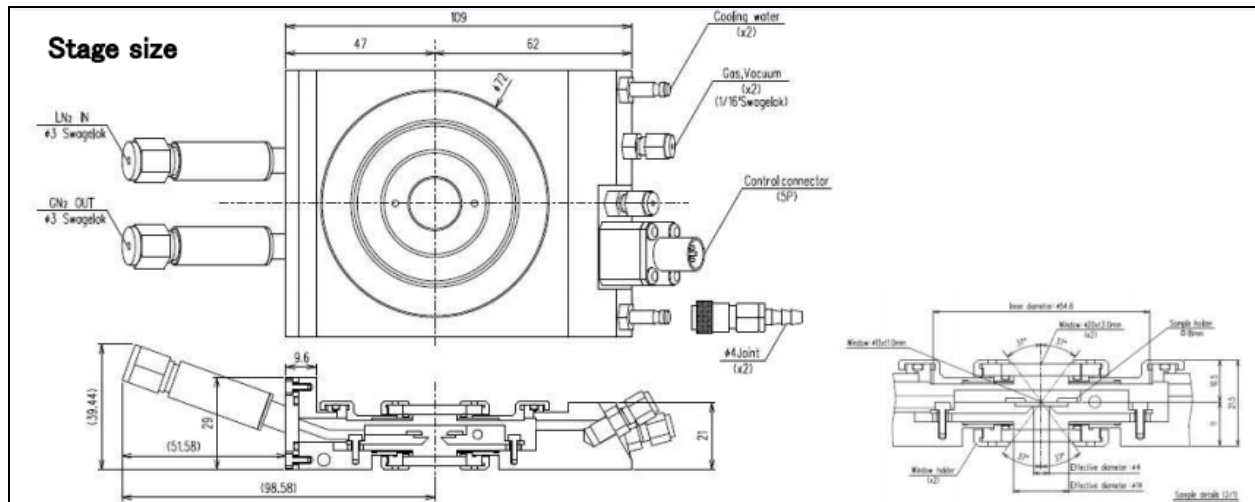
It is a small heating/cooling stage which has a cooling mechanism. It can be fitted with the sample stage of FT-IR and Raman Microscopes.

The accessory is little thicker than S84. However It is very thin, and it is so designed that it can be used with various kinds of lens. Temperature ranges between -190°C to $+500^{\circ}\text{C}$ can be maintained by using Liquid nitrogen as refrigerant.



Software enabled temperature controller can be connected with PC using USB cable. Temperature can be controlled and recorded from PC using this software. It blocks external heat when used at low temperature thus gives accurate temperature control. It can protect bedewing without purging.

We have a holder for microscope mapping and for motorized stage, and a holder to attach with a standard sample compartment as option. Method to replace a sample, crystals and reference mirror are same as Model S84. We provide a temp controller for low temperature, a container for 10L liquid Nitrogen, pipes for cooling, a pump for evacuated insulation, a diaphragm pump for liquid nitrogen. Also we have a needle valve for flow control of liquid nitrogen, and mass flow control.



Specifications:

Stage

Temperature Range : -190degC ~ +500degC (under vacuumed)

Stage size : 84mm x 109mm x 21mm (not included a connector plug and a tang)

Transmission effective diameter : ϕ 4mm

Window size for sample port : ϕ 20x2mm or 2mm

Window : KBr, BaF₂, CaF₂, Quartz etc.

Transmission window size : ϕ 13x1.0mm (MAX)

Gas connection : 1/16"swagelok x2

Cell body : Aluminum (alumite treatment)

Leak rate : Less than 1×10^{-9} Pam³ /sec

Coolant port : Tubing connector for I.D 4mm with automatic joint x2

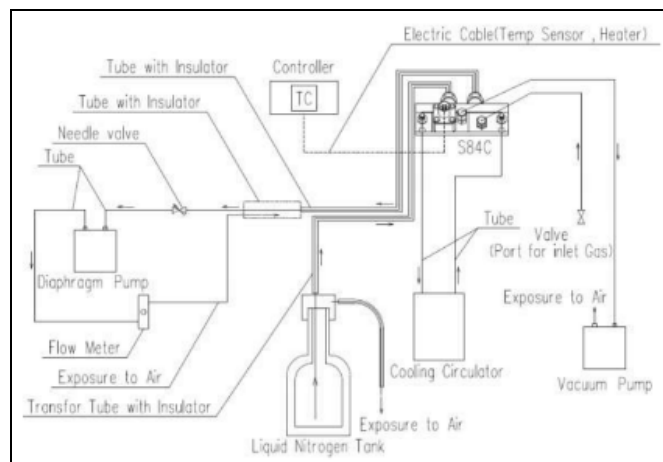
Temperature controller

Control method : PID control

Sensor input : Platinum resistance

Power supply capacity : AC100V 5A

Weight : About 4kg



ORDERING INFORMATION

Part Number

Description

STJ-M84SL-01	Model S84C Heat/Cool Compact stage Including Heat/cool stage, coolant tube, valve, reference mirror, sample holder(1,2,3mm) * Cell window and window for transmittance are not included.
STJ-M84L-03A1	Auto control system for S-84C (10L), Temperature controller, Dewar of liquid nitrogen (10L), Adapter of Dewar, Diaphragm Pump, Transfer tube, Mass Flow Controller.
STJ-M84L-03B1	Auto control system for S-84C (0.8L with small pump) Temperature controller, Dewar of liquid nitrogen (0.8L), Adapter of Dewar, Small Diaphragm Pump, Transfer tube, Mass Flow Controller.
STJ-M84L-03B2	Auto control system for S-84C (2L with small pump) Temperature controller, Dewar of liquid nitrogen (2L), Adapter of Dewar, Small Diaphragm Pump, Transfer tube, Mass Flow Controller.
STJ-M84L-03B3	Auto control system for S-84C (3L with small pump), Temperature controller, Dewar of liquid nitrogen (3L), Adapter of Dewar, Small Diaphragm Pump, Transfer tube, Mass Flow Controller.

Windows for cell body

915-3316	20x2 mm BaF2
920-3316	20x2 mm CaF2
STJ-M84-09	Quartz window plate for high magnification lens (W.D 4mm, 22x0.5mm window)

Windows for transmission measurement

915-3015	13x1 mm KBr Disk (maximum temperature: Approx 300°C)
HIN-3015	13x1 mm BaF2 Disk (maximum temperature: Approx 500°C)
920-3015	13x1 mm CaF2 Disk(maximum temperature: Approx 900°C)

Option

STJ-M84-02	Plate for motorized stage (Square)
STJ-M84-02C	Plate for motorized stage (Circle 100mm)
STJ-M84-04	Sample holder for 1, 2, 3mm effective diameter
STJ-M84-05	Reference mirror(13x1mm)
STJ-M84-06	Transmission Slide Mount
170-1000	Recirculator
STJ-0138-RP-N	Cryostat (evacuation unit for heat insulation) Rotary pump, oil mist trap, for line trap, leak valve and pipes