High Temperature･Vacuum･Gas Flow
Compact Heat stage S-100R

Model S100R is designed that small and thinly heating stage. This heat stage is usable for pyrometry with microscope of FT-IR and Raman spectroscopy.

Model S100R can use the objective lens and reflective mirror objective of short working distance for measurement or observation because of thickness of a stage is thin as much as possible.

Temperature : Temperature range is ambient to +600 degree C.

Vacuum: The sample compartment of Model S100R is sealed structure by O-ring and making the measurement condition under the vacuum

Gas Flow: S100 has two gas ports of 1/8 inch Swagelok.

Pressure: Stage can use under 0.5MPa pressure with pressure resistance windows such as BaF2, CaF2, ZnSe etc.

Option: An optional interface plate for motorized stage of FTIR and Raman microscope is available. Also, the S100R may be used inside the FT-IR sample compartment as a heated transmission cell

Changing the sample: It is very easy. The upper window plate uses a twist-on design; no tools are required. (But screws need for under pressure)

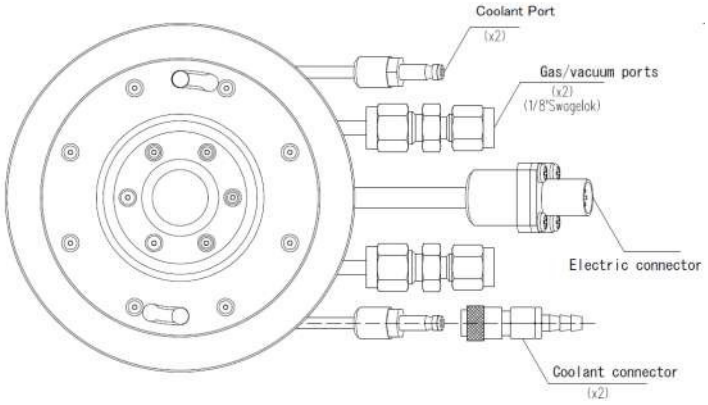
Transmission measurement: The sample may be placed on a 13mm diameter window or on the provided 13mm alignment mirror. A variety of windows are available including KBr, BaF2, CaF2, Quartz, and ZnSe. S100R also provide the three sample holders. Each holders has hole of 1, 2 and 3mm. It is very useful for Transmission measurement

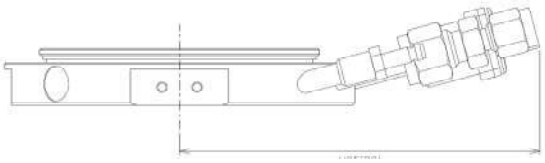
Cell body: S100R is made of Aluminum and very thin profile (16mm). It can use for short working distance objective of microscope

Safety: For minimize the transfer of external heat, S100R has water-cooling circuit in main body.

Please inquire about special designs for Model S100R to meet your sampling requirements.

The window and mirror of 13mm diameter are available to set on the sample port





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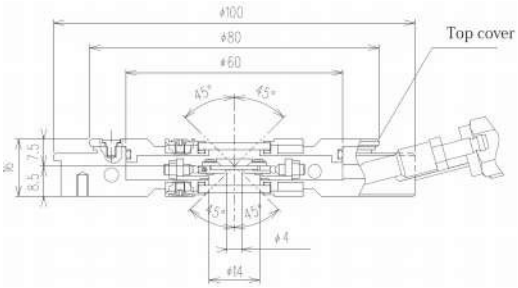
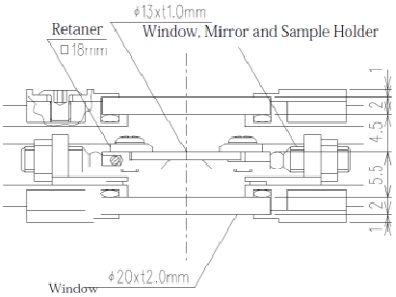
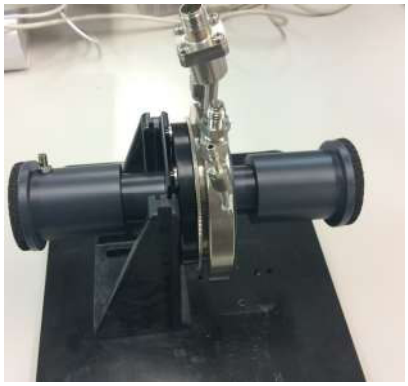




SPECIFICATION

Temperature range:	Ambient to +600degC (under the vacuum bottom)
Stage size:	Diameter 100mm / 16mm thickness (not include a connector plug and a tang)
Transmission effective diameter:	Diameter 4mm
Window size for chamber:	20mm(dia) x 2mm(thick)
Window size for sample port:	13mm(dia) x 1mm(thick)
Gas connection:	1/8 ″Swagelock x 2:
Cell body:	Alminum/Nickel coated
Leak rate:	Less than 1 × 10^{-9}Pa / m^3/sec
Maximum Pressure	0.5MPa (It make appropriate choice the windows
such as BeF2, CaF2, ZnSe, Quartz etc,)	
Coolant port:	Tubing connector for I.D 4mm with automatic joint
Rated heater:	40V-80W MAX
Control method:	PID control
Sensor:	Type-K thermocouple
Power supply capacity:	AC100V 5A
Weight of temperature controller:	1kg



ORDERING INFORMATION

Transmission Slide Mount for S100R and Purge tube for S100R

Part Number	Description
STJ-M100S-01	Model S100R Heat/vacuum/gas flow Compact stage
	Including Heat stage, coolant tube, valve, Sample holder for 1, 2, 3mm, reference mirror
076-2440-S100	Temperature Controller with TempPRO software and cable for S100R
STJ-M100-02	Plate for motorized stage (Square/Prior motorized stage) for S100R
STJ-M100-02C	Plate for motorized stage (Circle 100mm) for S100R
STJ-M100-02C1	Plate for motorized stage (Circle 120mm) for S100R
STJ-M100-02ML	Plate for motorized stage(Marzhauser 160x116) for S100R
STJ-M100-02MS	Plate for motorized stage(Marzhauser 116x116) for S100R
STJ-M100-04	Sample holder for 1, 2, 3mm effective diamater
STJ-M100-05	Reference mirror(13x1mm)
STJ-M100-06	Transmission Slide Mount for S100R
STJ-M100-11	Purge tube for S100R *This tubes needs STJ-M100-06 Transmission Slide Mount

Windows for cell body		Windows for transmission measurement	
KB20-2	20x2 mm KBr Disk	915-3015	13x1 mm KBr Disk (maximum temperature: Approx 300℃)
B20-2	20x2 mm BaF2 Dis	HIN-3015	13x1 mm BaF2 Disk (maximum temperature: Approx 500℃)
C20-2	20x2 mm CaF2 Disk	920-3015	13x1 mm CaF2 Disk (maximum temperature: Approx 900℃)