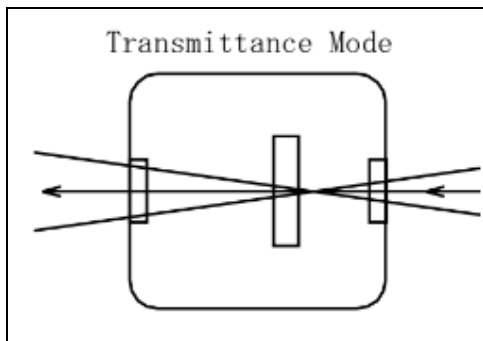


Multi Cell:

This Cell is designed to support various applications of FT-IR.

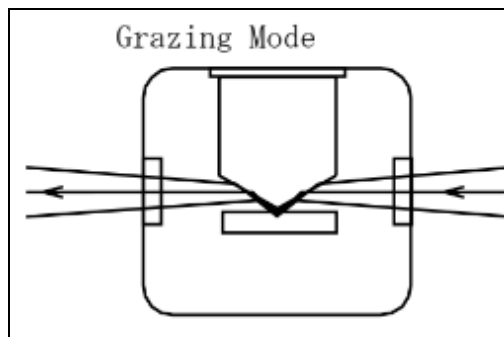
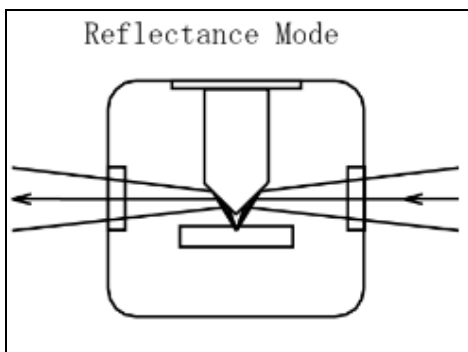
High temperature, high pressure or vacuum can be maintained inside the cell and can be used for transmission, specular and grazing angle reflection (GAO) measurements.

This equipment can be used for a variety of samples. You can change the measurement mode by changing the probe and mirror unit. There are two types of probe for this equipment; they are probe for transmission, and for reflection. By using a spacer, a probe for reflection can be used for both specular reflection and grazing angle reflection.



Regarding the type of windows,

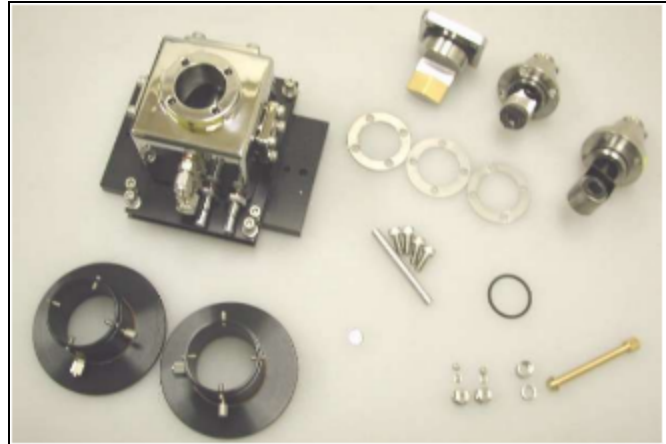
- KBr window is usually included as a standard set
- CaF₂ and ZnSe windows, which are harder, are used at high pressures
- KBr, CaF₂ and ZnSe can be used under vacuum condition



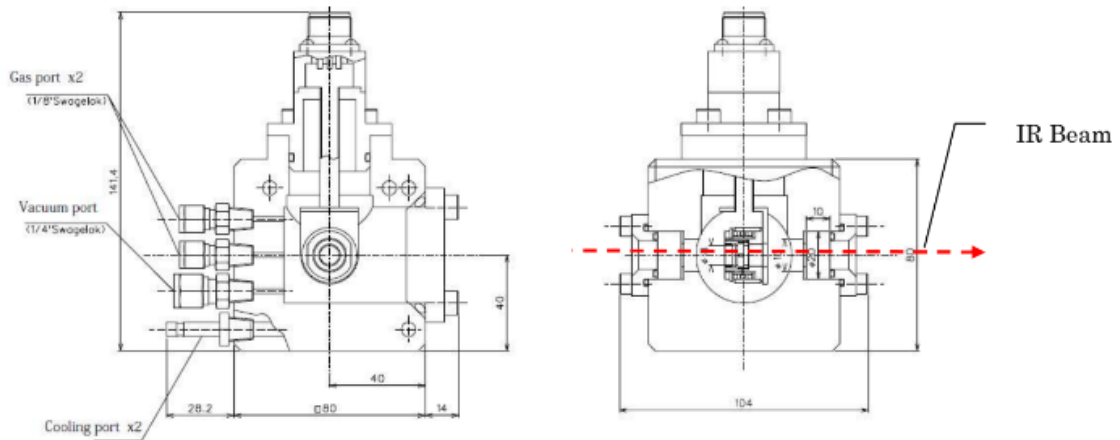
The diameter of a transmission sample is 10mm. Even if a sample is at a high temperature, the equipment itself is safe.

It's because, this equipment is kept at normal temperature by using a water circulation device (water cooled type). A cooling line, which has a one touch connector, can be easily attached and detached. There are two 1/8" Swagelok connections for gas lines and there in one 1/4" Swagelok connection for vacuum. Since a purge tube is attached to the main body, even if the cover of the sample room is opened, the measurement is not affected by steam and carbon

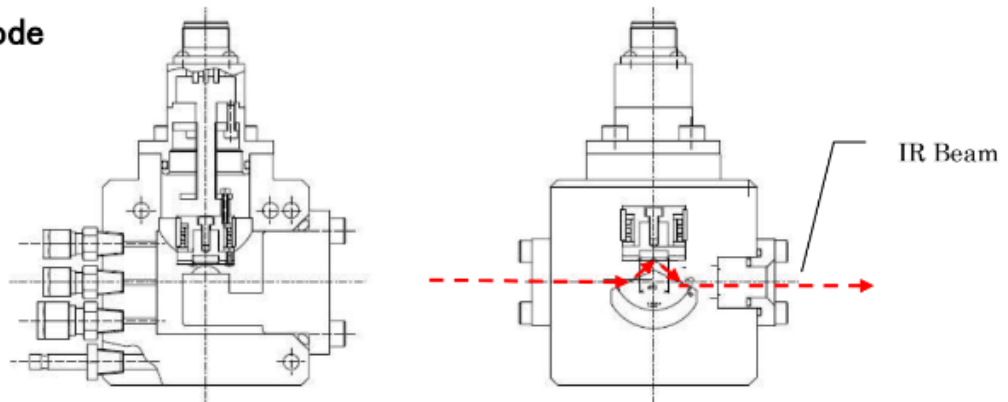
dioxide. In addition, the base plate for each type of FT-IR is included in the set. We can manufacture custom made models, such as versions for low temperature, different sample size, and different incidence angle.



Transmission mode



Reflection mode



Specifications

Measurement mode:	Transmittance, Reflectance (40 degrees), Grazing reflectance (70 degrees)
Temperature range:	Ambient to 800 deg C (under vacuum)
Temperature control:	less than +/- 1degC

Temperature control system:	PID control
Leak rate:	Less than 1x10 ⁻⁸ torr cc/sec
Pressure range:	Ambient to 3 atm with KBr Windows (20mm dia x 10mm thick) Ambient to 100 atm with ZnSe Windows (20mm dia x 10mm thick)
Sample diameter:	ϕ 10mm
Cooling:	Water cooling

ORDERING INFORMATION

Part Number	Description
STJ-0126-BOD	Multi Cell
STJ-0126-TRP	Transmittance heat probe
STJ-0126-REP	Reflectance heat probe
STJ-0126-REU1	Grazing angle reflectance mirror unit
STJ-0126-REU2	Reflectance mirror Unit
STJ-0126-TC	Temperature controller
STJ-0126-PTC	Programmable temperature controller
DSK-945-4606	KBr window (ϕ 20x10mm)
DSK-915-4606	CaF2 window (ϕ 20x10mm)
DSK-975-4606	ZnSe windows (ϕ 20x10mm)
TRL-108H	Cooling circulator
STJ-0126-O1	O-ring for window (10pcs)
STJ-0126-O2	O-ring for heat probe (10pcs)