

# Quadrupole Mass Spectrometer with Differential Pumping Kit [Qulee with YTP-H]

A variation of Qulee, adding new features in response to customer needs.

By adding a differential pumping unit, the Qulee provides measurement and analysis capabilities for process management and residual gas analysis.



Vacuum type



Atmospheric pressure type

## Features

- ▶ **Excellent Cost Performance**  
Provides gas analysis with an optional differential pumping unit
- ▶ **Compact Design**  
Utilizes standard vacuum unit "desktop YTP"
- ▶ **Integrated Display Unit Design**  
Provides visual data without need for a PC
- ▶ **Easy to Operate**  
One-click function for easy operation, no complex procedures
- ▶ **Atmospheric Pressure Analysis**  
Selectable maximum measurable pressures 3000Pa, 500Pa, 100Pa, 10Pa and 1Pa (22.5Torr, 3.75Torr, 0.75Torr,  $7.5 \times 10^{-2}$ Torr and  $7.5 \times 10^{-3}$ Torr/30mbar, 5mbar, 1mbar, 0.1mbar and  $1.0 \times 10^{-2}$  mbar)
- ▶ **Select a Model Depending on your Application**  
Select from the mass numbers 1 to 100 (BGM2-101/102), 1 to 200(BGM2-201/202), 1 to 300 (HGM2-302)
- ▶ **Low noise**  
43dB(A) or less at Ultimate pressure

- ▶ **Pressure indication**  
Designed for easy integration of 2 vacuum gauges
- ▶ **Complete Leak Test Function**  
Helium leak test, air leak test, leak up test
- ▶ **Qulee QCS Ver.4 (Ethernet compatible)**  
Software included (Windows 7/8/10)

## Applications

- ▶ Various types of gas analysis for research and development
- ▶ Gas monitoring of PVD system during processing
- ▶ Residual gas analysis in PVD system
- ▶ Residual gas analysis for high vacuum pumping equipment, etc.
- ▶ Impurity monitoring of various heat treatment furnaces
- ▶ Monitoring of end point and oxygen concentration of vacuum carburizing furnace
- ▶ Monitoring of freezing point and impurity of freeze dryer

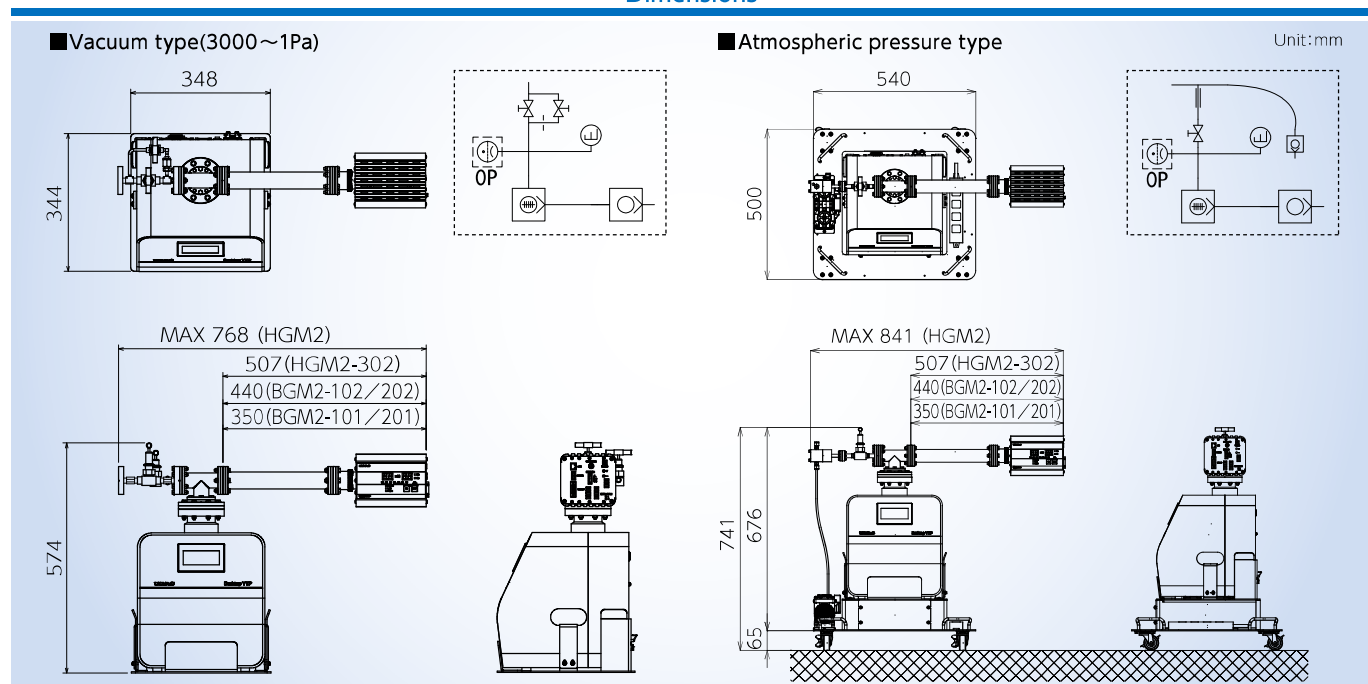
# Quadurupole Mass Spectrometer with Differential Pumping Kit [Qulee with YTP-H]

## Specifications

Qulee main body		Select from BGM2-101/102/201/202, HGM2-302 *Refer to the product catalogue for the specification of Qulee	
		Software	Qulee QCS Ver.4.0(Windows 7/8/10)
Max sampling pressure		Select from atmospheric pressure 3000Pa/500Pa/100Pa/10Pa/1Pa Select from atmospheric pressure 22.5Torr/3.75Torr/0.75Torr/7.5×10 <sup>-2</sup> Torr/7.5×10 <sup>-3</sup> Torr Select from atmospheric pressure 30mbar/5mbar/1mbar/0.1mbar/1.0×10 <sup>-2</sup> mbar *Atmospheric pressure type can be used only under the atmospheric condition *3000 to 1Pa(22.5 to 7.5×10 <sup>-3</sup> Torr,30 to 0.01mbar) types can be used under each pressure	
Specification pressure	Vacuum type	Gas introduction type (3000Pa~1Pa type)	Manual bellows valve (2 systems: orifice line / direct line) Mating flange/ICF070
	Variable leak valve type	Sampling pressure	Power-supply voltage AC100-240V Pressure can be controlled from atmospheric pressure to 10 <sup>-3</sup> Pa by manual adjustment
	Atmospheric pressure type (Atmospheric pressure sampling unit) APS-001	Capillary type (100,000Pa type)	Dry pump(Sweep) 6L/min,Ultimate pressure/6700Pa
			Controller unit Temperature contol and On/Off control of cartridge heater, On/Off control of sweep pump
		Capillary tube unit Manual bellows valve (1 line),Cartridge heater, insulation mat,Capillary tube (already mounted), Joint fitting 1/4 "Swagelok	
		Power-supply voltage Select for AC100V/220V	
Pump unit desktop YTP	Desktop YTP (YTP70A-D)	Turbo molecular pump 70L/s(N2)	
		Dry pump(Roughing) 19L/min(Diaphragm pump)	
		Power-supply voltage AC100-240V	
Accessories	AC100V power cord(*1),Base stage for DesktopYTP(*2),AC adapter for Qulee,LAN cable(3m) for Qulee, Software installation disc,Bolt set for fixing flange,Gasket(UFC114G,UFC070G),Power strip(*3), Casters(*4),Various fixing screws		
Options	Ionization gauge package(SH2-1,Sensor head cable 2m,Cross tube ,Bolts,Gaskets),USB-LAN adapter, Switching hub(8 ports or 16 ports)(*5),Floor cart(*6)		

- \*1 Please use power code when using the device in a foreign country or a region where the electrical voltage differs from AC100V. Three power codes are necessary for atmospheric pressure sampling unit, desktop YTP, and AC adapter for Qulee.
- \*2 Make sure to use a base stage when installing desktop YTP. For atmospheric pressure type, it has two-stage structure so that a control unit can be attached.
- \*3 Power strip only comes with atmospheric pressure/AC100V type.
- \*4 Casters only come with atmospheric pressure type. Please attach casters by yourself.
- \*5 AC adapter is necessary for an optional switching hub.
- \*6 Please set up the floor cart by yourself.
- \*7 Desktop YTP, Qulee main body, gas inlet, and other parts will be packaged separately. Please refer to the assembly manual for set up.

## Dimensions



\* Pump unit, Qulee main body, gas inlet, and other parts will be packaged separately. Please refer to the assembly manual for set up.

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