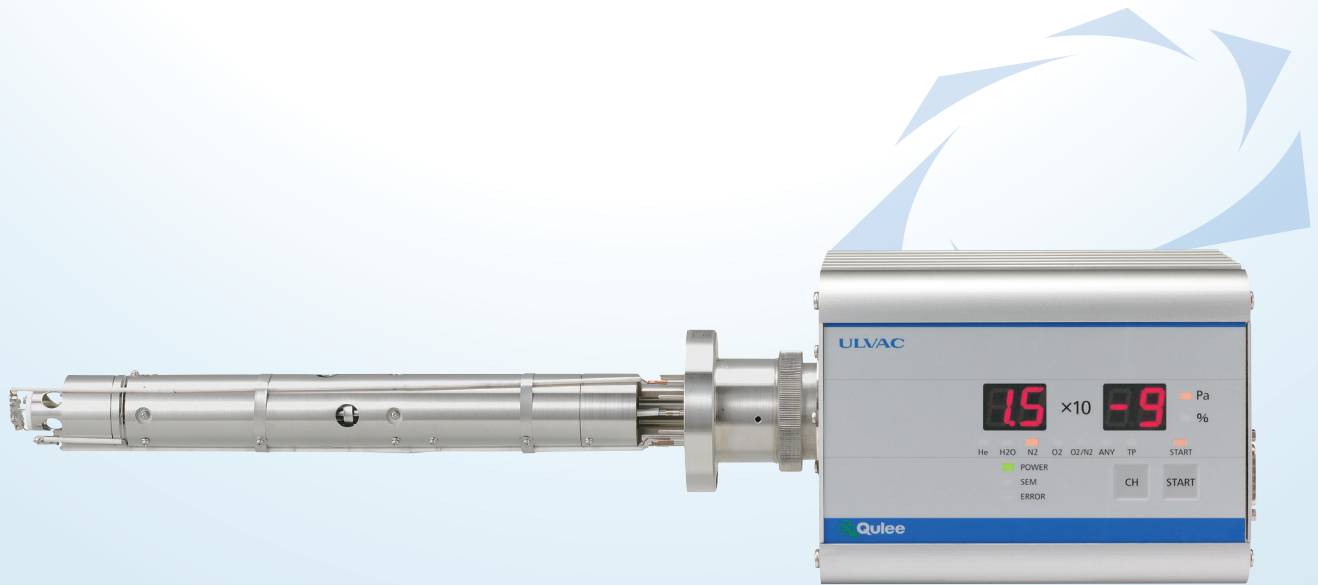


High Performance Process Gas Monitor [Qulee HGM2 Series]

ULVAC's new "Qulee HGM2" residual gas analyzer series with revolutionary simplicity of use. Offers highest sensitivity of all models at 2.5×10^{-6} A/Pa (3.3×10^{-4} A/Torr, 2.5×10^{-4} A/mbar), Qulee HGM2 can meet the needs of various R&D and other vacuum system process monitoring. (Ethernet compatible)



Features

- ▶ **Most Appropriate for R&D Applications**
Offers highest sensitivity 2.5×10^{-6} A/Pa (3.3×10^{-4} A/Torr, 2.5×10^{-4} A/mbar)
- ▶ **Communication interface**
Ethernet compatible
- ▶ **Integrated Display**
No need for PC
- ▶ **Simple Operation**
"One Click" function
- ▶ **Bake Out**
Max 250°C (482°F) high temperature bake (300°C (572°F) when the sensors are removed)
- ▶ **Degas Function**
Electron bombard degas
- ▶ **Maintenance**
Filament, ion source, and secondary electron multiplier are easy to replace
- ▶ **Protection and Maintenance Features**
Unit offers protection and maintenance of ion source and secondary electron multiplier Traceability of

analysis tube (Japanese Patent No. 5016031)

- ▶ **Various Leak Tests are Available**
Helium leak test, air leak test, leak up
- ▶ **Total Pressure Measurement**
Capable of total pressure measurement (ionization gauge)
- ▶ **Qulee QCS is Included**
This software is included and compatible with (Windows 7/8/10)
- ▶ **Applicable Standard**
Conforms with CE

Applications

- ▶ R&D such as thermal desorption gas analysis
- ▶ Residual gas analysis for ultra-high vacuum pumping equipment, etc
- ▶ Trace impurities in gas
- ▶ R&D for photovoltaic field
- ▶ Analysis of organic compound
- ▶ Environmental measurements

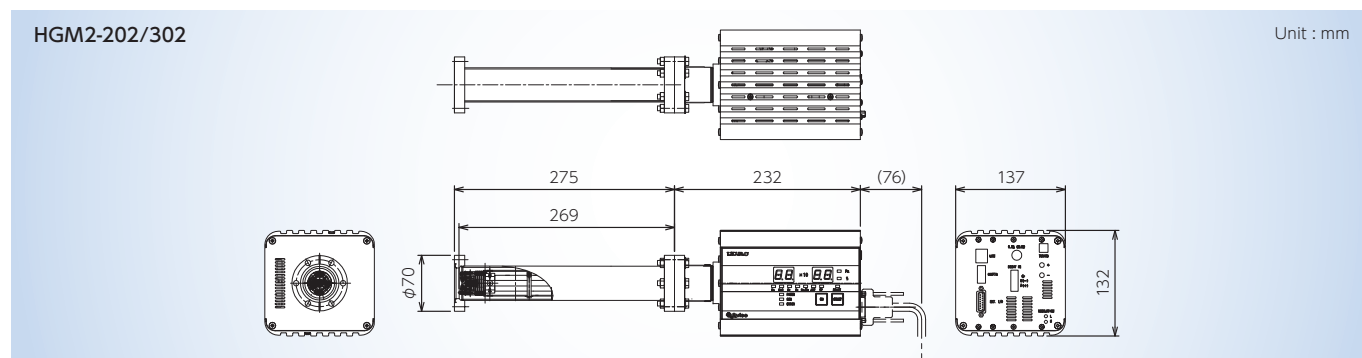
High Performance Process Gas Monitor [Qulee HGM2 Series]

Specifications

Model	HGM2-202		HGM2-302	
Mass filter type	Quadrupole			
Mass range	1 to 200 amu		1 to 300 amu	
Resolution	M/ΔM=1M(10% P.H.)			
Detector type	Faraday cup	SEM	Faraday cup	SEM
Sensitivity	2.5×10 ⁻⁶ A/Pa 3.3×10 ⁻⁴ A/Torr	4A/Pa 533 A/Torr	2.0×10 ⁻⁶ A/Pa 3.3×10 ⁻⁴ A/Torr	4A/Pa 533 A/Torr
	2.5×10 ⁻⁴ A/mbar	400 A/mbar	2.5×10 ⁻⁴ A/mbar	400 A/mbar
Minimum detectable partial pressure	Approx. 10 ⁻⁹ Pa Approx. 7.5×10 ⁻¹² Torr Approx. 1×10 ⁻¹¹ mbar	Approx. 10 ⁻¹³ Pa Approx. 7.5×10 ⁻¹⁶ Torr Approx. 1×10 ⁻¹² mbar	Approx. 10 ⁻⁹ Pa Approx. 7.5×10 ⁻¹² Torr Approx. 1×10 ⁻¹¹ mbar	Approx. 10 ⁻¹³ Pa Approx. 7.5×10 ⁻¹⁶ Torr Approx. 1×10 ⁻¹² mbar
Maximum operating pressure	1×10 ⁻² Pa 7.5×10 ⁻³ Torr 1×10 ⁻⁴ mbar			
Filament	Ir / Y ₂ O ₃ , 2 pcs			
Ionizing voltage	25 to 70 eV (Default : 70eV)			
Emission current	0.1mA/0.5mA/1.0mA (default:0.5mA)			
Degas	Electron bombard type 330V, 5mA			
Total pressure function	Capable/10 ⁻² ~ 10 ⁻⁵ Pa			
SEM Voltage	-1.0 to -3.0kV (1V step)			
"One Click" function	Capable / He/H ₂ O/N ₂ /O ₂ /Any gas			
"One Click" leak test function	Capable			
Power input	DC24V±10% 50W			
Weight (sensor unit/sensor)	2.4kg/0.81kg			
Maximum sensor operating temperature	250°C (482°F)			
Maximum bakeout temperature (electronics removed)	300°C (572°F)			
Operating temperature range	10 to 40°C (50 to 104°F)			
Operating humidity range	15 to 80% (not condensing)			
IP rating	IP30 (Sensor unit)			
Power connector	MSTBV2.5/3-STF-5.08			
Communication interface	Ethernet compatible			
External input / output connector	D-sub15-pin (M2.6 screw) (with option)			
Communication connector	RJ45			
External input / output signal	Analog input (0 to 10V)×2, External interlock input (pressure protection)×1, Error output ×1 (FIL, SEM, RF fault), Partial pressure setpoint output ×2 (fault, alarm), Total pressure setpoint output ×1			
Software	Qulee QCS Ver.4.0 later (Windows 7/8/10)			
Standard accessories	Power connector, Communication cable (3m long), Software (install CD), Instruction manual (CD)			
Optional accessories (cf. Qulee optional catalogue)	Communication cable (10,15,20,30,50m long), AC power adapter, USB-LAN adapter, Switching hub(8 ports or 16 ports), Input / output connector, Jacket heater, Carry case			
Applicable standard	CE			

*Please prepare an AC/DC power supply or please purchase the AC/DC adapter of an option.

Dimensions



ULVAC, Inc. Components Division

www.ulvac.co.jp/en

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