

# Residual Gas Monitor **REGA**



Based on our experience in mass filter type gas analyzers, the REGA is a residual gas monitor with complete functions to satisfy customer. Using residual gas analysis and gas analysis during processing, the REGA is perfect for vacuum quality control for various types of vacuum equipment, such as PVD. The unit is also applicable in research and development and gas analysis of thermal desorption.

### Features

- Easy control and data logging with the RS-232C or RS-485 of a personal computer. (Up to 8 units can be connected when the RS-485 is used)
- Total pressure measurement.
- Compact and lightweight designed sensor unit for easy mounting.

### Applications

- Residual gas analysis in PVD system
- Gas monitoring of PVD system during processing (RG-102P, RG-202P)
- Residual gas analysis for high vacuum pumping equipment, etc.
- Various types of gas analysis for research and development

### Specifications

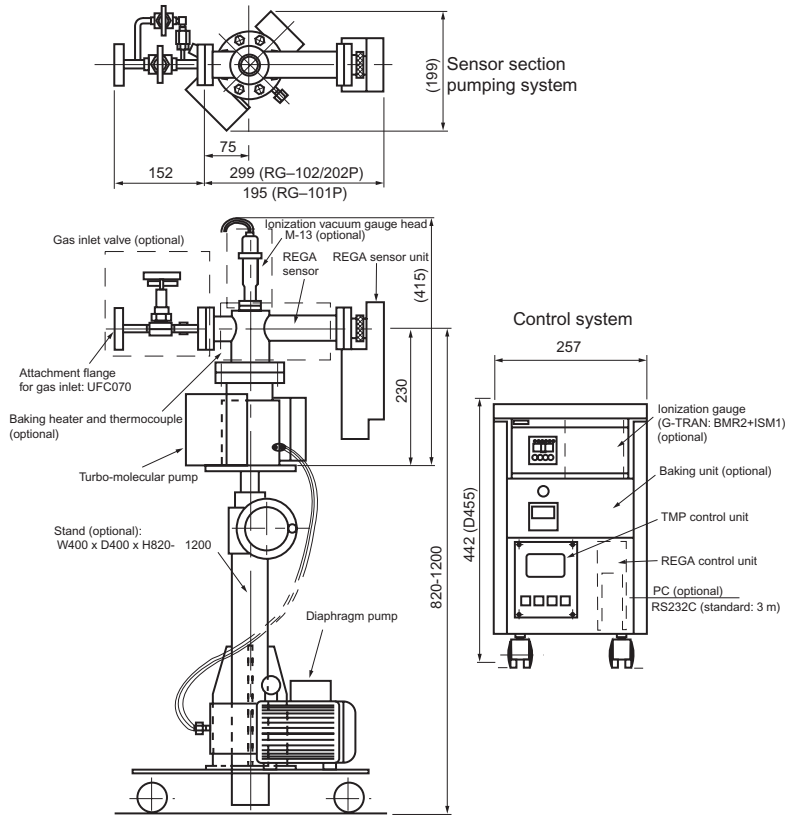
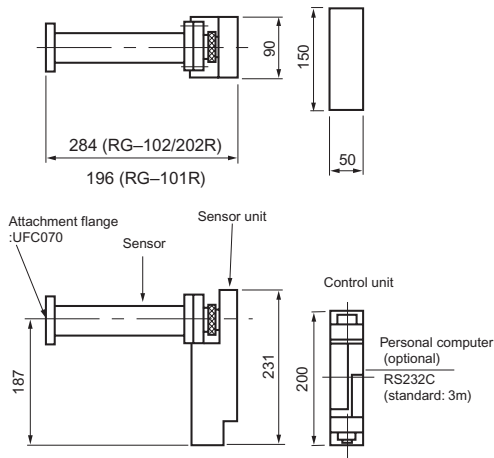
Item	Model	REGA		
		RG-101	RG-102	RG-202
<b>Sensor</b>				
Measuring mass range	amu	1 - 100		2 - 200
Resolution		M/ M=1M(10%P.H.)		
Sensitivity	A/Pa	1x10 <sup>-7</sup>	5x10 <sup>-3</sup>	5 x 10 <sup>-3</sup>
Minimum detectable partial pressure	Pa	10 <sup>-8</sup>	10 <sup>-12</sup>	10 <sup>-11</sup>
Max. operating pressure	Pa	1x10 <sup>-2</sup>		
Ion source		B-A Type		
Filament		Ir/Y <sub>2</sub> O <sub>3</sub> x 2		
Emission current	mA	0.5		
DC amplification range	A f.s.	1 x 10 <sup>-8</sup> - 1 x 10 <sup>-13</sup>	1 x 10 <sup>-5</sup> - 1 x 10 <sup>-13</sup>	1 x 10 <sup>-5</sup> - 1 x 10 <sup>-13</sup>
Ion detection		Faraday cup	EM tube/Faraday cup	
Bake temperature	°C	120		
<b>Control Unit</b>				
Interface		RS-232C/RS485		
External I /O and other		Analog input (0 - 10V) x 2		
		Set-point out x 2		
		External interlock		
		Total pressure set-point x 1		
Utility		DC24V 2A		
<b>Differential Pumping system</b>				
Gas inlet valve		Manual bellows		
Max. sampling pressure	kPa	1.3		
Turbo Molecular Pump		60L/s (N <sub>2</sub> )		
Fore Pump		15L/min		
Gauge		Option		
<b>Others</b>				
Software		Qulee QCS		
Option		Stand, Baking heater, Gas inlet valve, RS232C/RS485 converter Ion gauge, (SECS/GEM) Communication software, Data processing software (Origin-QCS)		

External Dimension Diagram

(unit : mm)

RG-101/102/202R

RG-101/102/202P



System Diagram

RG-101/102/202R

RG-101/102/202P

