

“Multi Ionization Gauge” whose design and function were renewed



SH200 series
ST200 series

5 features of the renewed Multi Ionization Gauge

Two different series by application

SH200: Bayard-Alpert type ionization gauge. For ultra-high vacuum measurement.

ST200: Triode type ionization gauge. For application with much contamination.

ULVAC own concept

Connectable with different measurement range sensor heads. Minimal parts replacement in case of failure.

Compact

Achieved world's smallest class. (56% reduction of controller volume compared to the previous model)

Higher usability

Easy set point setting and status checking by connecting Windows PC / Android.

Filament life alarm function

Telling sensor head exchange timing before filament break by monitoring filament power.

ULVAC own concept

Connectable with different measurement range sensor heads.

- Expandable measurement range in combination with optional units.
- Minimal parts replacement in case of failure.
- Controllable as one vacuum gauge by host systems.

Measurement pressure range

Pa	1E-8	1E-7	1E-6	1E-5	1E-4	1E-3	1E-2	1E-1	1E+0	1E+1	1E+2	1E+3	1E+4	1E+5	
mbar	1E-10	1E-9	1E-8	1E-7	1E-6	1E-5	1E-4	1E-3	1E-2	1E-1	1E+0	1E+1	1E+2	1E+3	
Torr	7.5E-11	7.5E-10	7.5E-9	7.5E-8	7.5E-7	7.5E-6	7.5E-5	7.5E-4	7.5E-3	7.5E-2	7.5E-1	7.5E+0	7.5E+1	7.5E+2	
					ST200										
					ST200 + SWU10-R										*1
					ST200 + SWU10-R + SAU										*2
				SH200											
				SH200 + SWU10-R										*1	
				SH200 + SWU10-R + SAU										*2	

*1 Double combination for measurement up to atmospheric pressure.

*2 Triple combination for atmospheric check for load-lock control.



Example of combination use with optional units

Higher usability

Highly improved usability by connecting Windows PC / Android

- Easy set point setting (no need for power supply from host systems)
- Real-time trend graph display
- Error status display
- Data logging function (CSV output)
- * Need power supply when measuring.

Application software: UL-MOBI

PC: Windows

Smartphone: Android 6 or later



Image of connection with PC/smartphone

Model	ST200-A	ST200-R	SH200-A	SH200-R
Measurement pressure range*	1 x 10 ⁻⁵ to 1 x 10 ⁺¹ Pa 7.5 x 10 ⁻⁸ to 7.5 x 10 ⁻² Torr 1 x 10 ⁻⁷ to 1 x 10 ⁻¹ mbar		5 x 10 ⁻⁸ to 1 x 10 ⁺¹ Pa 3.75 x 10 ⁻¹⁰ to 7.5 x 10 ⁻² Torr 5 x 10 ⁻¹⁰ to 1 x 10 ⁻¹ mbar	
Accuracy	±10%: 1 x 10 ⁻⁴ to 3 x 10 ⁺⁰ Pa, 7.5 x 10 ⁻⁷ to 2.2 x 10 ⁻² Torr, 1 x 10 ⁻⁶ to 3 x 10 ⁻² mbar		±15%	
Filament	1 pc (Ir/Y ₂ O ₃)		2 pcs (Ir/Y ₂ O ₃)	
Degas method	Electron bombardment			
Measurement value output	LOG output (DC 0 to 10V)			
Set point	3 points (open collector output)	None	3 points (open collector output)	None
Serial communication	None	RS232C / RS485	None	RS232C / RS485
Power supply voltage	DC 20 to 28V			
Dimensions	69 x 63 x 125 mm (ST200 / SWT-16)			
Connectable sensor unit	Pirani sensor unit SWU10-R (optional), pressure sensor unit SAU (optional)			
Connectable sensor head	SWT-16 (KF16), SWT-25 (KF25)		M-44 (KF16), M-45 (KF25), M-46 (ICF070)	
Applicable standard	CE			

* Can measure from high vacuum (ST200) / ultra-high vacuum (SH200) to atmospheric pressure in combination with optional pirani sensor unit SWU10-R and pressure sensor unit SAU.

ULVAC, Inc.
Components business HQ
URL <https://showcase.ulvac.co.jp/en/contact>

