

Smartphone-Direct Pirani Gauge [SWU10-U]

This is a pirani vacuum gauge which can measure degree of vacuum by connecting your smartphone directly with USB cable. No need for dedicated power supply and display.



SWU10-U(NW16 spec)



Image of product usage
(Note) Smartphone and USB cable are not attached.

Features

- ▶ **Direct Connection with Smartphone**
Direct connection with smartphone by using USB cable (patent pending). No need for the other components.
※Connection with PC is also possible.
- ▶ **No Need for AC Power Supply**
No need for a dedicated power supply.
- ▶ **Lightweight and Compact**
Size: $\phi 46 \times 81$ mm, weight: 85g (NW16 spec). The smallest and lightest of ULVAC pirani gauge lineup.
- ▶ **Excellent Shock Resistance**
Excellent shock resistance by ULVAC original structure (patent number 6595945) and body protection rubber.
- ▶ **Wide Range Measurement**
Measureable pressure range: 5×10^{-2} to $1 \times 10^{+5}$ Pa
(3.75×10^{-4} to 760Torr, 5×10^{-4} to 1,013mbar)
- ▶ **Various Fitting Lineup**
7 kinds of fitting lineup including NW16, R1/8, etc.

Applications

- ▶ Ultimate pressure check in vacuum pump maintenance.
- ▶ Pressure check in vacuum equipment maintenance.

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Specifications

Name	Smartphone-Direct Pirani Gauge						
Model	SWU10-U						
Measureable pressure range	5.0×10 ⁻² to 1.0×10 ⁺⁵ Pa (3.75×10 ⁻⁴ to 760Torr, 5×10 ⁻⁴ to 1,013mbar)						
Accuracy* ¹ (N ₂)	1×10 ⁻¹ to 1×10 ⁺⁴ Pa 7.5×10 ⁻⁴ to 75Torr : ±10% 1×10 ⁻³ to 100mbar						
	5×10 ⁻² to 1×10 ⁺¹ Pa, 1×10 ⁺⁴ to 1×10 ⁺⁵ Pa 3.75×10 ⁻⁴ to 7.5×10 ⁻⁴ Torr, 75 to 760Torr : ±20% 5×10 ⁻⁴ to 1×10 ⁻³ mbar, 100 to 1,013mbar						
	1×10 ⁻¹ to 1×10 ⁺⁴ Pa 7.5×10 ⁻⁴ to 75Torr : ±2% 1×10 ⁻³ to 100mbar						
Repeatability	1×10 ⁻¹ to 1×10 ⁺⁴ Pa 7.5×10 ⁻⁴ to 75Torr : ±2% 1×10 ⁻³ to 100mbar						
Material of filament	Pt						
Burst pressure* ²	2×10 ⁺⁵ Pa(abs)						
Operating temperature range	10 to 40°C (50 to 104°F)						
Operating humidity range	15 to 85% (not condensing)						
Storage temperature	-20 to 65°C (not condensing)						
IP rating	IP30						
Fixing position	Free						
Power supply voltage	DC5V±5% 350mA _{MAX}						
I/O connector	USB microB						
Fitting	NW16	NW25	R1/8	Φ18tube	Φ15tube	ICF034	sanitary
Weight	85g	88g	94g	93g	80g	80g	145g
Option	USB2.0 cable (certified product, C-microB, 1.5m)* ³ Inspection certificate, calibration certificate, traceability certificate, JCSS calibration certificate						

*1 Value after atmospheric pressure adjustment and zero point adjustment.

*2 Consider separately burst pressure of flange and clamp, etc.

*3 Select C-microB OTG cable when using a commercial USB cable.

Available smartphone*⁴

Android 6 or later

Connector: USB Type-C

*4 For available smartphone models list, see ULVAC web page.

Application software "UL-MOBI"*⁵

For smartphone:	Download from Google Play
For PC:	Download from ULVAC web page

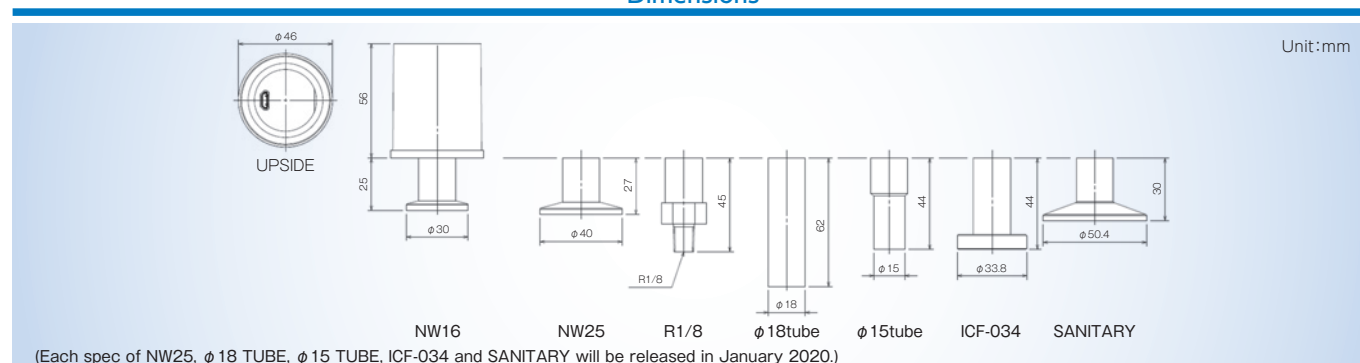
Image of "UL-MOBI" on smartphone



- Pressure value display
- Data logging function
Log data is saved as CSV format.
Sampling interval: Min. 200ms
- Trend display

*5 For further details, see explanation of app on Google Play.

Dimensions



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▶ This catalog is published in order to sell this product in overseas. Please see Japanese catalog when purchasing in Japan.

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