

**Launching G-TRAN Series Multi Ionization Gauge ST2  
Enabling a long product life that maintains high precision  
even under harsh conditions**

**ULVAC, Inc.**

ULVAC, Inc. (Headquarters: Chigasaki, Kanagawa; President and CEO: Hisaharu Obinata; hereafter referred to as ULVAC) is pleased to announce that the company has developed G-TRAN series multi ionization gauge ST2, a transducer-type ionization vacuum gauge with a long product life that maintains high measurement accuracy even under harsh conditions, and will start selling the product in October 2015.

[Background]

A variety of gas molecules may exist in a vacuum space under certain conditions. Therefore, it is not uncommon that vacuum measurements are performed under conditions that are severe for a vacuum gauge. As a result, we often hear that users encounter problems regarding lifetime of vacuum gauges (a short product life due to contamination, problems in electrical discharge, an increase in sensor head replacement frequency, etc.) and measurement accuracy (variation in sensitivity, errors, etc.). Major reasons for these difficulties are the following:

- Outgassing released during various vacuum processes
- Outgassing released from test pieces (samples)
- Residue of cutting oil or cleaning fluid used during processing vacuum chambers
- Outgassing released from wiring materials, moving mechanisms, motors, etc. inside vacuum chambers

These elements contaminate sensor heads causing problems such as a reduction in the length of life of filaments, a decrease in sensitivity, and failures in emission current and electric discharge. To avoid such problems, it is necessary to replace sensor heads periodically. More frequent replacement of sensor heads leads to:

- An increase in running costs for sensor heads, which are consumables
- Losses caused by suspension of production lines (systems) during replacement of sensor heads
- An increase in time and effort required to replace them

[Overview]

To resolve these difficulties, ULVAC has developed an ionization vacuum gauge with a structure designed to lighten the load on ion collectors by reducing the ion current value per area and to make electric potential in ionized space uniform. This gauge enables the performance of accurate measurements for a longer period of time (more than 30 times longer compared to our conventional models) even under

harsh conditions for ionization vacuum gauges. We believe our new product will greatly contribute to reducing running costs and downtime of your various vacuum systems and improving yield ratio.

[Features]

Features of the new ionization vacuum gauge G-TRANS series ST2 are:

- ULVAC's unique electrode structure
  - ⇒ Stable sensitivity, high precision, long product life (more than 30 times longer compared to our conventional models) and low running costs.
- Compact metal tube
  - ⇒ Smaller install space and lower risk of sensor head damage.
- Multi-ion gauge-type sensor unit
  - ⇒ Connecting the Pirani vacuum gauge unit and the atmospheric pressure sensor enables a reduction in control signals.

[Specifications]

- Standard specifications: ST2-1, serial communications specifications: ST2-2
- Measurement range: 10 Pa to 1E-5 Pa (possible to use it in combination with the Pirani vacuum gauge and the atmospheric pressure sensor)
- Sensor head specifications: A compact metal tube Filament material: Ir/Y<sub>2</sub>O<sub>3</sub> coating
- Degassing function: Electron stimulated desorption method

[Photo]



G-TRAN Series Multi Ionization Gauge ST2

[Sales Target and Price]

Sales target: 500 units in the first year, 5,000 units in FY2017

Sales price range: from 120,000 yen (tax-excluded)

[Contact]

ULVAC, Inc. Components Division Overseas Sales in Japan  
TEL: +81-467-89-2261 FAX: +81-467-89-2267