

G-TRAN Series Cold Cathode Ion Gauge Sensor Unit SC1



SC1/C-21

SC1 is a magnetron type cold cathode vacuum gauge. Since no filament is used, long lifetime between gauge head maintenance is expected. Because there are no filaments to burn out, the gauge is also undamaged by accidental exposure to atmospheric pressure. Easy maintenance also reduces the cost of ownership.

Features

- When the pressure display is not required, the following advantages can be realized:
 - Vacuum gauge cost is reduced because the display has been eliminated
 - Smaller size frees-up system control panel space
 - Wiring is reduced
- Operated by DC24V
- Easy maintenance
- Output of analog signal and 2 set points is possible

Applications

- Process control in the pressure range of precision vacuum equipment used for semiconductor, optics and electronic parts manufacturing.
- Process control in low vacuum range for industrial equipment such as furnaces.
- Process control in the pressure range for vacuum system with multiple process chambers, such as in-line sputtering and single wafer processing equipment.

Specifications

Type	Sensor unit
Model	SC1
Compatible sensor head	C - 21, 23, 24, 25
Measurement pressure range	$5.0 \times 10^{-5} - 1.0 \text{ Pa}$
Operating temperature range	10 - 40 °C
Measurement value output	Nonlinear output : 0 to 10VDC
Set point : Monitor output for adjustment	Nonlinear output : 0 to 10VDC
Control input signal	HV ON/OFF
Type of output signal	Open Collector output, negative logic
Control output signal	Pressure protection actuating signal
	Set point actuating signal 1/2
LED display	POWER, HV, PROTECT, SET POINT1/2
Power	DC24V±2V, 2A
Input/Output connector	D-sub-15P (M2.6 screw)
Weight	430g (Excluding sensor head)
Standard accessories	Connector : 1
	Instruction Manual

IO and analog GND are not isolated from the power GND.
Communication connector is not included.

External Dimension Diagram

(unit: mm)

Sensor Dimension
SC1 :Sensor unit

