

G-TRAN Series Display Unit

ISP1. ISP2 for Pirani Gauge/
ISM1. ISM2 for Hot Cathode Gauge/
IM1R1, IM2R1 for Multi 4 sensor units



ISM1



IM2R1

These units were developed for customers of G-TRAN Series gauges that require a pressure display for normal vacuum system operation or maintenance work. DC24V and AC100V are also available.

The display units have 2 set points that can be output in addition to the set point outputs from the sensor or box unit (max. 4 set points can be used). 4 CH display unit enables you to operate 4 gauges with a display. 8 set points and 4 analog outputs are available in the 4 CH display.

Features

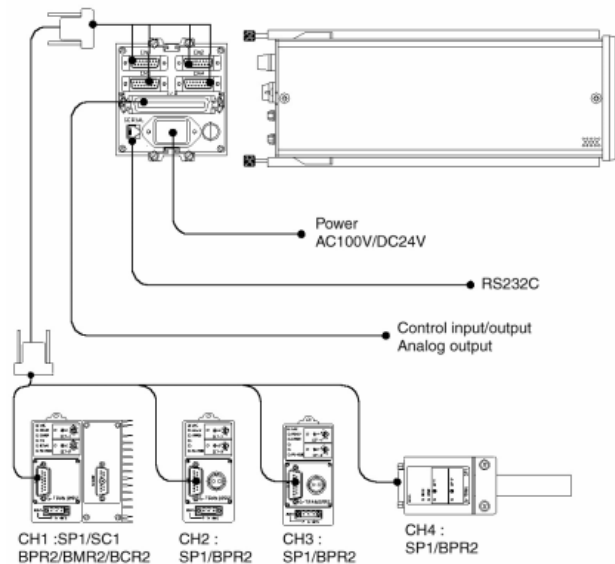
- 48 x 48 mm or 96 x 96 mm DIN size displays are used (space around control panel is minimized)
- Input power of DC24 or AC100 V can be selected
- Easily readable LEDs used for displays

Features (4CH display unit)

- Maximum four sensor units/ box units can be connected(Only one ion gauge can be connected at a time.)
- Multi 4 channel work and display with a single LCD display
- Possible to establish an interlock between the measurement of an ion gauge on CH1 and a Pirani gauge on CH2
- 8 set points out put
- Analogue out put (4CH), IO control and RS-232C are available as a standard

Applications

- Manufacturing equipment requiring pressure displays
- Equipment requiring many set points



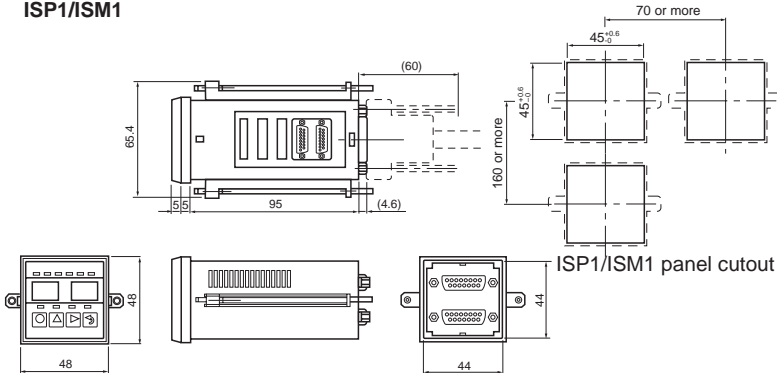
Specifications

Item	Model	Display unit		4Ch display unit
		Hot cathode ISM1/ISM2	Pirani ISP1/ISP2	Combination IM1R1/IM2R1
Measuring unit connected		1pc		1 - 4 pc
Compatible measuring unit	Sensor unit	—	SP1	SP1/SC1
	Box unit	BMR2	BPR2	BPR2/BMR2
Pressure range	Pa	$5.0 \times 10^{-8} - 9.9 \times 10^0$	$4.0 \times 10^{-1} - 3.0 \times 10^3$	PG : $4.0 \times 10^{-1} - 3.0 \times 10^3$ IG : $5.0 \times 10^{-8} - 9.9 \times 10^0$ CCG : $5.0 \times 10^{-5} - 1 \times 10^0$
Display		—		
		Digital display of 2 digits exponent part $\square.\square \times 10 - \square\square$		
	Update time	0.5sec		
	Accuracy	$\pm 10\%$ [Pa] of the input pressure value from measuring unit		
Operating temperature range		10 - 40 °C		
Sampling time		50ms.Five times of moving average processing		
		Pseudo-logarithmic output 0 to 10VDC (1V linear signal in each digit)		
Data output	Update time	50ms		
	Resolution	10mV		
	Accuracy	± 0.5 at the mantissa part of pressure display		
Set point		2 points	8 points	
Control output signal (Open collector output, negative logic)		PROTECT signal	ERROR signal	PROTECT/ERROR signal
		Emission Valid [OK/NG]	—	Emission Valid [OK/NG]
		Set point actuating signal 1/2		Set point actuating signal 1-8
Control input signal (Operates by open collector input)		FIL ON/OFF	—	FIL(HV) ON/OFF
		FIL 1/2		FIL 1/2
		DEGAS ON/OFF		DEGAS ON/OFF
LED display		POWER, CAL, ERROR, PROG, LOCK, SET POINT		
		FIL, Emission Valid, DEGAS		FIL, Emission Valid, DEGAS
IO connector		SENSOR :D-sub 15-Pin / HOST :D-sub 15-Socket		SENSOR :D-sub 15-Socket HOST : Unfenol 50
Power requirements		ISM1 : 24VDC, 80mA ISM2 : 100VAC, 150mA	ISP1 :24VDC, 80mA ISP2 :100VAC, 150mA	100VAC,150mA
Weight	g	ISM1 :132 ISM2 :1500	ISP1 :132 ISP2 :1500	IM1R1 :1360 IM2R1 :1760
Communication		—		RS-232C
Standard Accessories		Connector socket x1 Connector pin x1 Instruction manual Power cable x1 (ISM2/ISP2)		Connector (Input) x 4 Connector (Output) x 1 Instruction manual Power cable x 1

External Dimension Diagram

(unit: mm)

ISP1/ISM1



ISP2/ISM2/IM1R1/IM2R1

