GP-6210 High Accuracy Pressure Transmitter

Features

- ✓ High accuracy: up to ±0.03% FS
- ✓ 3.3ppm resolution
- ✓ RS485 & 4~20mA double outputs
- ✓ Temperature output support
- ✓ Software zero clear and recalibration
- ✓ Stainless steel, robust design

Introduction

The GP-6210 is a high-precision pressure transmitter designed for demanding industrial applications. It integrates a high-stability, media-isolated silicon sensor with advanced signal processing, achieving exceptional reliability. Digital temperature compensation and non-linear correction ensure accurate pressure measurement across the compensated range. Its highly integrated design simplifies installation and long-term maintenance while maintaining superior performance.

Application

The GP-6210 high-precision pressure transmitter is specifically designed for environments where precise pressure measurement is critical. It finds extensive application in industrial process control, high-accuracy hydraulic and leak detection equipment, as well as laboratory testing apparatus. Its robust stainless-steel construction and media-isolated design ensure stable operation across wide temperature fluctuations and in demanding industrial environments. With its high-resolution output capability, this transmitter is equally suited for real-time monitoring systems and integration into leak detection equipment, providing precise pressure data to support critical decision-making.

Specification

Item	Parameter
Pressure Type	Gauge / Absolute / Seal
Pressure Range	-100kPa···0kPa to 20kPa···35MPa
Over Pressure	2 x FS
Accuracy (Compensated) ①	B: ±0.1% FS A: ±0.05% FS S: ±0.03% FS
Temperature Output②	<±1℃ (-20℃~70℃) only RS485
Supply Voltage	8~28VDC (4~20mA) 5~28V DC (RS485)
Output	RS485 (Modbus RTU) ③

	4–20mA two-wire RS485 & 4–20mA
Baud rate	115200 (default)
Output Resolution④	3.3 ppm of range
Power Consumption	3.3mA (typical, no current output)
Response Time	<10ms
Sampling Frequency	>30Hz
Long-term Stability	0.1% FS/year
Compensated Temperature	-10℃~70℃
Operating Temperature	-30℃~80℃
Storage Temperature	-40℃~85℃
Insulation Resistance	100MΩ @100V
Vibration	10g, 20Hz–2000Hz
Shock	20g, 11ms
Protection	IP65/IP68

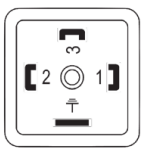
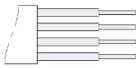
1: Including nl, hy, res and temperature influence.

2. Temperature sensor is on circuit board, the temperature output just for reference.

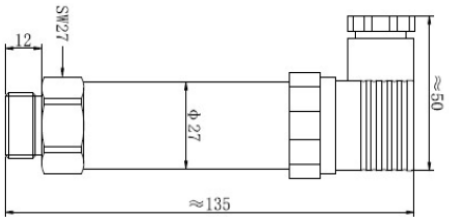
3. RS485 communication consumes significant power, which may affect the output of the two-wire 4–20 mA signal. During transmitter measurement, simultaneous use of RS485 and the two-wire 4–20 mA signal is not recommended.

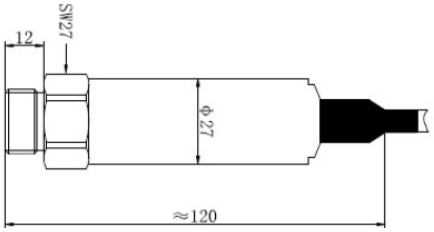
4. Only for RS485 digital output.

Electrical Definition

DIN 175301-803A Angular Connector			M12x1 Connector			Cable		
Definition		Pin	Definition		Pin	Definition		Color
	V+	1		V+	1		V+	Black
	V- / Iout	2		V- / Iout	2		V- / Iout	Red
	RS485A	3		RS485A	3		RS485A	Yellow
	RS485B	⏚		RS485B	4		RS485B	White/Blue

Dimension (mm)





Software

The dedicated debugging software can simultaneously connect multiple pressure transmitters via RS485, supporting baud rate adjustment, unit switching, and pressure/temperature display. It features pressure zero-point shift and secondary calibration for sensor linearity.

Order Guide

GP-6210	Pressure Transmitter							
	Code1	Pressure range						
	(X-Y) U	U:kPa/MPa/bar, -100kPa…0kPa to 20kPa…35MPa						
		Code2	Pressure Type					
		G	Gauge 20kPa~3.5MPa					
		A	Absolute 70kPa~3.5MPa					
		S	Seal >3.5MPa					
			Code3	Output				
			R1	RS485				
			R2	4~20mA & RS485				
			R3	4~20mA				
				Code4	Accuracy (FS)			
				S	±0.03% (Not fit <100KPa G and ⩽200kPa A)			
				A	±0.05%			
				B	±0.1%,			
					Code5	Electrical connector		
					B1	DIN 175301-803A		
					B2	Cable, 2m		
					B3	M12x1, 4pin		
						Code6	Pressure port	
						C1	M20x1.5 M	
						C2	G1/2 M	
						C4	G1/4 M	
GP-6210-(0-1)MPa-G-R1-A-B1-C4								

Note:

1. Above options do not cover all possibilities. For other custom requirements, please contact us.
2. RS485 Modbus communication protocol please contact us.