

DR3710 Digital Pressure Gauge Introduction



The digital pressure gauge DR3710 adopt advanced diffused silicon pressure sensor, a 24-bit dedicated AD processing chip and an industrial-grade MCU, which make the pressure gauge provides an accurate, reliable, and economic solution for a wide range of pressure applications.

Applications

- Mechanical engineering
- Process control and automation
- Hydraulics and pneumatics
- Pumps and compressors
- Water and gas

Features

- Pressure range from -1bar to 2500bar
- High-definition backlight display LCD
- Display resolution -19999~19999
- Three digits ambient temperature display
- Zero clearing
- Max/Min peak value holder
- Pressure progress bar display
- Battery indicator
- Five pressure units switching (bar, psi, kPa, MPa, kg / cm²)

Technical Parameters

Measuring range: -0.1~100MPa Overpressure: 2XFS

Accuracy: Pressure: $\pm 0.1\%FS$, $\pm 0.2\%FS$, $\pm 0.4\%FS$

Temperature: $\pm 2^{\circ}C$

Display: LCD with backlight

Display range: -19999~19999

Response frequency: 3.2kHz

Menu functions: zero clearing, maximum / minimum value display, unit switching, ambient temperature display, pressure progress bar display, battery indicator.

Compensation temperature: 0~50 $^{\circ}C$

Ambient temperature: -10~60 $^{\circ}C$

Medium temperature: -20~80 $^{\circ}C$

Storage temperature: -20~60 $^{\circ}C$

Power supply: 2 x AAA batteries (3 V)

Current consumption: < 1.9ma (backlight is not turned on)

Shell material: stainless steel 304 (shell / pressure joint)

Pressure diaphragm material: stainless steel 316L

Seal ring material: VITON

Enclosure protection: IP54

Range and Resolution

Range		Unit and Resolution					Accuracy
Full Range Mpa		Mpa	bar	kgf	PSI	Kpa	
0.025		0.0250	0.2500	0.2551	3.626	25.00	0.1 0.2 0.5
0.04		0.0400	0.4000	0.4082	5.801	40.00	0.1 0.2 0.5
0.06		0.0600	0.6000	0.6122	8.702	60.00	0.1 0.2 0.5
0.1		0.1000	1.0000	1.0204	14.503	100.00	0.1 0.2 0.5
0.16		0.1600	1.6000	1.6327	23.21	160.00	0.1 0.2 0.5
0.25		0.2500	2.500	2.551	36.26	250.0	0.1 0.2 0.5
0.4		0.4000	4.000	4.082	58.01	400.0	0.1 0.2 0.5
0.6		0.6000	6.000	6.122	87.02	600.0	0.1 0.2 0.5
1.0		1.0000	10.000	10.204	145.03	1000.0	0.1 0.2 0.5
1.6		1.6000	16.000	16.327	232.1	1600.0	0.1 0.2 0.5
2.5		2.500	25.00	25.51	362.6	2500	0.1 0.2 0.5
4.0		4.000	40.00	40.82	580.1	4000	0.1 0.2 0.5
6.0		6.000	60.00	61.22	870.2	6000	0.1 0.2 0.5
10		10.000	100.00	102.04	1450.3	10000	0.1 0.2 0.5
16		16.000	160.00	163.27	2321	16000	0.1 0.2 0.5
25		25.00	250.0	255.1	3626		0.1 0.2 0.5
40		40.00	400.0	408.2	5801		0.1 0.2 0.5
60		60.00	600.0	612.2	8702		0.1 0.2 0.5
70		70.00	700.0	714.3	10153		0.1 0.2 0.5
100		100.00	1000.0	1020.4	14503		0.1 0.2 0.5
160		160.00	1600.0	1632.7			0.1 0.2 0.5
200		200.0	2000	2039			0.1 0.2 0.5
250		250.0	2500	2549			0.1 0.2 0.5
Full Range Kpa							
-10~10		0.0100			1.4503	10.000	0.1 0.2 0.5
-25~25		0.0250			3.626	25.00	0.1 0.2 0.5
-40~40		0.0400			5.801	40.00	0.1 0.2 0.5
-60~60		0.0600			8.702	60.00	0.1 0.2 0.5
-100~0		0.1000	1.0000	1.0204	14.503	100.00	0.1 0.2 0.5
-100~100		0.1000	1.0000	1.0204	14.503	100.00	0.1 0.2 0.5
-100~160		0.1600	1.6000	1.6327	23.21	160.00	0.1 0.2 0.5
-100~250		0.2500	2.500	2.551	36.26	250.0	0.1 0.2 0.5
-100~400		0.4000	4.000	4.082	58.01	400.0	0.1 0.2 0.5

-100~600	0.6000	6.000	6.122	87.02	600.0	0.1 0.2 0.5
-100~1000	1.0000	10.000	10.204	145.03	1000.0	0.1 0.2 0.5