DATASHEET

SPMK223 Digital pressure calibrator

BCLog-Control

Distributed by AKRIBIS



SPMK223
Digital Pressure Calibrator



Gauge Pressure



Differential Pressure

Product Description

SPMK223 intelligent digital pressure calibrator is a powerful pressure calibrator with high accuracy, which is mainly used to calibrate pressure (differential pressure) transmitter, pressure gauge, pressure switch and other pressure instruments. The standard RS232 interface can be used for data transfer into computer by our data logger software.

Product Characteristics

- HART communication to calibrate HART pressure transmitter with 24V supply;
- Large LCD screen with backlight and temperature display;
- Six digits resolution display switch;
- 11 pressure units available: kg/cm2, inHg, inH2O, Pa, kPa MPa, bar, mbar, psi, mmHg, mmH2O;
- Connection thread of M20x1.5, NPT, BSP optional;
- Pressure types: gauge pressure, absolute pressure, differential pressure, compound pressure;
- Percentage display of the pressure value;
- Zero function, peak function;
- Storage 40 files, 40 data per file;
- Rechargeable lithium battery power supply;
- Automatic trigger function for pressure switch measure with a trigger time of less than 15 ms.

Accessories(included)

Signal	Range	Resolution	Accuracy
Voltage measurement	(-30~30)V	0.1mV	±(0.01%RD+0.005%FS)
Current measurement	(-30~30)mA	0.1μA	±(0.01%RD+0.005%FS)
Switch detection	If the switch is energized, voltage range (3 to 24) V		
Temperature measurement	(0~50)℃	/	±1.0℃
24VDC output	(24±0.5)V, max. loaded 50mA		

Technical Parameters

Project	Parameters
Pressure range①	(-0.1~250)MPa
Accuracy②	±0.02/0.05%F.S
Pressure type	Gauge pressure, Absolute pressure, Differential pressure
Connector	Connection thread of M20×1.5, NPT, BSP optional
	Differential Pressure Gauge: 4.00 mm diameter PVC plastic hose
	Electrical connector: Ø4 banana plug
Use environment	Ambient temperature: (0~50)°C; Storage temperature: (-20~60)°C; Relative humidity: <90% non-condensing; Atmospheric pressure: (86~106)kPa.a
Communication	RS232
Power supply	AC and DC power supply
Dimensions	Head:Ø120mm×45mm;Total length:190mm
Weight	0.7 kg
Additional features	Pressure leak detection, pressure switch trigger, pressure peak recording, file storage and export, etc

Note: ① ②Specific ranges and accuracy levels are shown in the Pressure Range Selection Table on P5.

Accessories(included)

Serial number	Description	QTY	Picture
1	Main product	**1 pc**	
2	Power adapter	**1 pc**	
3	Rechargeable lithium battery	**1 pc**	
4	Test lead	**1 set**	
5	Differential pressure gauge connection cable (only for differential pressure calibrator)	**1 pc**	
6	User's manual	**1 pc**	
7	Test report	**1 pc**	

Pressure Range Select Table of kPa/MPa/bar.

Pressure(kPa/MPa)	Pressure(bar)	Accuracy(±%F.S)	Pressure Type
(-100~0)kPa	(-1~0)bar	0.05/0.1	Gauge Pressure
(0~100)kPa	(0~1)bar	0.05/0.1	Gauge Pressure
(0~160)kPa	(0~1.6)bar	0.02/0.05	Gauge Pressure
(0~250)kPa	(0~2.5)bar	0.02/0.05	Gauge Pressure
(0~400)kPa	(0~4)bar	0.02/0.05	Gauge Pressure
(0~600)kPa	(0~6)bar	0.02/0.05	Gauge Pressure
(0~1)MPa	(0~10)bar	0.02/0.05	Gauge Pressure
(0~1.6)MPa	(0~16)bar	0.02/0.05	Gauge Pressure
(0~2.5)MPa	(0~25)bar	0.02/0.05	Gauge Pressure
(0~4)MPa	(0~40)bar	0.02/0.05	Gauge Pressure
(0~6)MPa	(0~60)bar	0.02/0.05	Gauge Pressure
(0~10)MPa	(0~100)bar	0.02/0.05	Gauge Pressure
(0~16)MPa	(0~160)bar	0.02/0.05	Gauge Pressure
(0~25)MPa	(0~250)bar	0.02/0.05	Gauge Pressure
(0~40)MPa	(0~400)bar	0.02/0.05	Gauge Pressure
(0~60)MPa	(0~600)bar	0.02/0.05	Gauge Pressure
(0~70)MPa	(0~700)bar	0.02/0.05	Gauge Pressure
(0~100)MPa	(0~1000)bar	0.05/0.1	Gauge Pressure
(0~160)MPa	(0~1600)bar	0.1/0.2	Gauge Pressure
(0~250)MPa	(0~2500)bar	0.1/0.2	Gauge Pressure
(-100~100)kPa	(-1~1)bar	0.02/0.05	Gauge Pressure
(-100~160)kPa	(-1~1.6)bar	0.02/0.05	Gauge Pressure
(-100~250)kPa	(-1~2.5)bar	0.02/0.05	Gauge Pressure
(-100~600)kPa	(-1~6)bar	0.02/0.05	Gauge Pressure
(-0.1~1.0)MPa	(-1~10)bar	0.02/0.05	Gauge Pressure
(-0.1~2.5)MPa	(-1~25)bar	0.02/0.05	Gauge Pressure
(-0.1~4)MPa	(-1~40)bar	0.02/0.05	Gauge Pressure
(-0.1~6)MPa	(-1~60)bar	0.02/0.05	Gauge Pressure
(0~100)kPa.a	(0~1)bar.a	0.05	Absolute Pressure
(0~160)kPa.a	(0~1.6)bar.a	0.05	Absolute Pressure
(0~250)kPa.a	(0~2.5)bar.a	0.05	Absolute Pressure
(0~400)kPa.a	(0~4)bar.a	0.05	Absolute Pressure
(0~600)kPa.a	(0~6)bar.a	0.05	Absolute Pressure
(0~1)MPa.a	(0~10)bar.a	0.05	Absolute Pressure
(0~1.6)MPa.a	(0~16)bar.a	0.05	Absolute Pressure
(0~2.5)MPa.a	(0~25)bar.a	0.05	Absolute Pressure
(0~4)MPa.a	(0~40)bar.a	0.05	Absolute Pressure
(0~6)MPa.a	(0~60)bar.a	0.05	Absolute Pressure
(0~10)MPa.a	(0~100)bar.a	0.05	Absolute Pressure

Pressure(kPa/MPa)	Pressure(bar)	Accuracy(±%F.S)	Pressure Type
(0~16)MPa.a	(0~160)bar.a	0.05	Absolute Pressure
(0~25)MPa.a	(0~250)bar.a	0.05	Absolute Pressure
(0~40)MPa.a	(0~400)bar.a	0.05	Absolute Pressure
(0~60)MPa.a	(0~600)bar.a	0.05	Absolute Pressure
(0~5)kPa	/	0.2	Differential Pressure
(-5~5)kPa	/	0.1	Differential Pressure
(0~10)kPa	/	0.1	Differential Pressure
(-10~10)kPa	/	0.05	Differential Pressure
(0~16)kPa	/	0.05	Differential Pressure
(-16~16)kPa	/	0.05	Differential Pressure
(0~25)kPa	/	0.05	Differential Pressure
(0~40)kPa	/	0.05	Differential Pressure
(-40~40)kPa	/	0.05	Differential Pressure
(0~60)kPa	/	0.05	Differential Pressure
(-60~60)kPa	/	0.05	Differential Pressure

Pressure Range Select Table of psi.

Pressure (psi)	Pressure(bar)	Accuracy(±%F.S)	Pressure Type
-15	-1	0.05	Gauge Pressure
2	0.16	0.05	Differential Pressure
5	0.35	0.05	Differential Pressure
10	0.7	0.05	Gauge Pressure
15	1	0.05	Gauge Pressure
30	2	0.05	Gauge Pressure
50	3.5	0.05	Gauge Pressure
100	7	0.05	Gauge Pressure
300	20	0.05	Gauge Pressure
500	35	0.05	Gauge Pressure
600	40	0.05	Gauge Pressure
1000	70	0.05	Gauge Pressure
2000	140	0.05	Gauge Pressure
3000	200	0.05	Gauge Pressure
5000	350	0.05	Gauge Pressure
10000	700	0.05	Gauge Pressure
15000	1000	0.05	Gauge Pressure
25000	1600	0.1	Gauge Pressure
36000	2500	0.1	Gauge Pressure

Note: For ±0.02%FS accuracy, please contact with us.
Temperature compensation included. Accuracy for one-year stability.