CWY300 Intelligent Digital Pressure Calibrator V1.0

- ✓ Pressure range: -1～2500 bar
- ✓ Accuracy: 0.1%FS, 0.05%FS, 0.02%FS
- ✓ Communication interface: USB + RS485/RS232
- ✓ Media type: Gas / liquid
- ✓ Support 24-hour continuous calibration and data storage

Overview

CWY300 series is a high-precision intelligent pressure calibrator, integrating standard meter, process calibration and data management, providing one-stop calibration solution for pressure transmitters, sensors, pressure gauges, sphygmomanometers, etc. It covers the full range of -100kPa~250MPa to meet the needs of eight core fields such as military, energy, medical and manufacturing. The range covers -1~2500bar, which meets the demanding needs of military, energy, medical, manufacturing and other fields. Rugged design with IP65 protection for harsh environments.

Specifications

Items	Parameters
Pressure Range	-1～2500 bar
Pressure Type	Gauge, absolute, differential, vacuum
Accuracy	0.1%FS, 0.05%FS, 0.02%FS
Medium	Gas / Liquid
Unit	Pa, kPa, MPa, psi, bar, mbar, inH_2O, mmH_2O, inHg, mmHg, kgf/cm^2, cmH_2O, hPa
Display	FSTN LCD, white backlight, 6/5-digit display Analog light bar indication of pressure value percentage, time Temperature charging status, power indication, etc.
Stability	0.02%FS /year
Operating Temperature	-10℃～ 50℃
Ambient temperature	-10℃～ 50℃
Storage Temperature	-20℃～ 70℃
Humidity	10%～95%H, no condensation
Atmospheric Pressure	(86～106) kPa
Power Supply	Internal battery or adapter
Battery Work Time	700 hours without backlight and DC24V output
Changing Time	Battery charging time: ≤ 2.5 hours;
Communication Interface	USB + RS485/RS232
Overall Dimensions	Meter head Ø124×48 mm, total length 187 mm

Net Weight	0.7kg
Pressure Port	M20×1.5 Male (or customized)
Protection	IP65
Power Output	24V DC
Signal Input	Voltage / Current DC
Functions	Unit switching, pressure / electrical measurement zeroing Communication mode switching, display digit switching Pressure calibration, electrical measurement calibration, etc.

Interface

Project	Realm	Resolution	metrics
Voltage Measurement	(-22～22) V	0.1mV	±(0.02%rdg+1.0mV)
Current Measurement	(-22～22)mA	0.1uA	±(0.02%rdg+1.0uA)
Switch Detection	Support mechanical switch and NPN, PNP electronic switch		
24V Output	24V±2% max. load capacity 54mA with short circuit protection		
Electrical Connection	Measurement connection Standard Ø4 mm jack		
Output Connection:	standard Ø4 mm jack		
Charging Connection	standard Ø5.5 mm jack		
RS485 / RS232 Connection	DB9 socket RS485 maximum communication distance ≤ 1000 m RS232 maximum communication distance is 3～5m		
USB Connection	Standard USB class A interface USB communication distance ≤ 3 m		

Order Guide

Range	Accuracy	Medium	BP	Range	Accuracy	Medium	BP
(-100～0) kPa	0.05	air	3x	(-10～10) kPa	0.02 / 0.05	air	4x
(0～16) kPa	0.05	air	3x	(-16～16) kPa	0.02 / 0.05	air	4x
(0～25) kPa	0.05	air	3x	(-25～25) kPa	0.02 / 0.05	air	4x
(0～40) kPa	0.05	air	3x	(-40～40) kPa	0.02 / 0.05	air	4x
(0～60) kPa	0.05	air	3x	(-60～60) kPa	0.02 / 0.05	air	4x
(0～100) kPa	0.02 / 0.05	air	3x	(-100～100) kPa	0.02 / 0.05	air	4x
(0～160) kPa	0.02 / 0.05	air	3x	(-100～160) kPa	0.02 / 0.05	air	4x
(0～250) kPa	0.02 / 0.05	air	3x	(-100～250) kPa	0.02 / 0.05	air	4x
(0～400) kPa	0.02 / 0.05	air	3x	(-100～400) kPa	0.02 / 0.05	air	4x
(0～600) kPa	0.02 / 0.05	air	3x	(-100～600) kPa	0.02 / 0.05	air	4x
(0～1) MPa	0.02 / 0.05	air/liquid	3x	(-0.1～1) MPa	0.02 / 0.05	air	4x
(0～1.6) MPa	0.02 / 0.05	air/liquid	3x	(-0.1～1.6) MPa	0.02 / 0.05	air	4x
(0～2.5) MPa	0.02 / 0.05	air/liquid	3x	(-0.1～2.5) MPa	0.02 / 0.05	air	4x
(0～4) MPa	0.02 / 0.05	air/liquid	3x	(-0.1～4) MPa	0.02 / 0.05	air	4x
(0～6) MPa	0.02 / 0.05	air/liquid	3x	(-0.1～6) MPa	0.02 / 0.05	air	4x
(0～10) MPa	0.02 / 0.05	air/liquid	3x				

(0～16) MPa	0.02 / 0.05	air/liquid	3x				
(0～25) MPa	0.02 / 0.05	air/liquid	3x				
(0～40) MPa	0.02 / 0.05	air/liquid	3x				
(0～60) MPa	0.02 / 0.05	air/liquid	3x				
(0～100) MPa	0.05 / 0.1	air/liquid	1.5x				
(0～160) MPa	0.05 / 0.1	air/liquid	1.5x				
(0～250) MPa	0.05 / 0.1	air/liquid	1.5x				

Note:

Temperature automatic compensation range: -10℃～50℃

Pressure transfer medium requirement is non-corrosive.

Calibration period: 1 year

Standard configuration

Items	Amount
Aluminum alloy aviation instrument case	1
7.4V rechargeable lithium battery	1
CWY300 Intelligent Digital Pressure Calibrator	1
DC12V/2A power adapter	1
CWY300 manual	1
Factory inspection record sheet	1
Certificate of Conformity	1
Warranty card	1

Optional

Certificate of calibration