

# PR9120 Series Full-Automatic Pressure Generator



## PR9120Q Full-Automatic Pneumatic Generator

PR9120Q is specially designed for calibrating micro-differential pressure gauges and small range pressure gauges. This machine is developed with a dual-piston supercharging structure combined with software control technologies using the latest algorithms. The pressure stabilization speed is fast and the control precision is high, which is very suitable for the needs of periodic, large-scale, and repetitive measurement and calibration work in industries and enterprises.



## PR9120Y Full-Automatic Hydraulic Generator

PR9120Y adopts the unique preloading technology, which can realize cyclic preloading, and can calibrate 2 or 5 pressure instruments at one time (expanded through pressure connection manifold platform). The pressure control adopts the advanced pressure following technology, the feedback is fast, and the novel software control technology makes the pressure control more accurate and the stability faster.



## PR9120D Full-Automatic Pressure Calibration Bench

The PR9120D is a feature-packed, full-automatic pressure calibration device. It seamlessly integrates all functionalities of the PR9120Q and PR9120Y models, achieving comprehensive coverage across the full spectrum from vacuum/low pressure to high pressure ranges. The hydraulic unit can be expanded with a 1-to-9 manifold rig, enabling the simultaneous calibration of 9 pressure instruments, significantly boosting work efficiency.

## I. Features

- Pressure generated quickly, stably, without overshoot, which conforms to the relevant pressure instrument calibration regulations;
- Full protection functions: when the set pressure is higher than the standard gauge, the

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software system will prompt input error; When the system pressure unexpectedly exceeds 10% of the standard gauge scale, the generator will immediately stop pressurizing and release the pressure immediately to protect the safety of the gauge;

- The generator is equipped with an emergency stop button for quick pressure relief;
- The control error and stabilization time can be customized to improve the calibration accuracy;
- The generator can replace multiple ranges of PR9112 intelligent pressure calibrators to improve the measurement precision and facilitate periodic calibration;
- PR9120Q/Y: Equipped with a 14-inch touchscreen, integrated Windows 10 operating system, and proprietary control software.

PR9120D: Features a brand-name industrial PC, integrated Windows 11 operating system, and proprietary control software. This architecture enhances operational stability and supports remote maintenance, debugging, and software upgrades.

## II. Technical Parameter

Item	PR9120Q Full-Automatic Pneumatic Generator	PR9120Y Full-Automatic Hydraulic Generator	PR9120D Full-Automatic Pressure Calibration Bench	
			Pneumatic Unit	Hydraulic Unit
Pressure Range①	(-40~40)kPa, (-0.095~1)MPa	(-0.06~0~100)MPa	(-40~40)kPa, (-0.095~1)MPa	(-0.06~0~100)MPa
Accuracy	0.05%F.S 0.02%F.S	0.05%F.S 0.02%F.S	0.05%F.S 0.02%F.S	0.05%F.S 0.02%F.S
Working Medium	Air	Transformer oil or purified water	Air	Transformer oil or purified water
Pressure Control Stability	<0.005%F.S	<0.005%F.S	<0.005%F.S	<0.005%F.S
Time for Pressure to Reach Set Point	<10 seconds	<20 seconds	<10 seconds	<20 seconds
Communication Interface	RS232, USB, Network port	RS232, USB, Network port	RS232, USB, Network port	RS232, USB, Network port
Pressure Connector	M20×1.5(2pcs) φ4mm, φ6mm Quick plug(2pcs/each)	M20×1.5(3 pcs)	M20×1.5(3 pcs) φ4mm, φ6mm Quick plug(2pcs/each)	M20×1.5(3 pcs)
Dimensions	540mm×380mm×340mm	660mm×380mm×400mm	1850mm×750mm×1750mm	
Weight	28kg	35kg	258kg	
Ambient Temperature of Operation	(-20~50)°C	(-20~50)°C	(-20~50)°C	
Relative Humidity of Operation	<95%	<95%	<95%	
Power Supply	AC220V	AC220V	AC220V	

① When the ambient atmospheric pressure is 100kPa.a (a : Absolute)

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