



GC 5890N

Full digital gas chromatograph

INTRODUCTION

GC 5890N full digital gas chromatograph can be selected with a variety of detectors, and packed column, shunt/non-shunt capillary column sampling system; Fully compatible with Agilent 6890N gas chromatograph detector and associated detector control panel, chromatography workstation and automatic samplers. Excellent cost performance, excellent performance, stable and reliable operation.

PERFORMANCE CHARACTERISTICS

1. New integrated digital electronic circuit, high control precision, stable and reliable performance, up to 0.01 temperature control precision.
2. With self-diagnosis function, stopwatch function (convenient flow measurement), operation timer function, power failure storage and protection function, keyboard lock function, anti-power mutation interference function, network data communication and remote control function.
3. Injection system unique design, lower detection limit.
4. Optional automatic/manual gas six-way injector, headspace injector, thermal resolution injector, cracking furnace injector, methane converter, automatic injector.
5. Temperature programmed, column temperature box temperature precision control, stable balance more quickly.
6. Can be installed FID, TCD, ECD, FPD, NPD, PDHID six detectors, each detector can be independent temperature control, FID detector is easy to disassemble and install, easy to clean or replace the nozzle; TCD stability time 20 minutes.
7. With automatic online detection function.



Supporting Products

Headspace sample feeder

Thermal desorption instrument

Gas generator

Cracker

Gas purifier

Chromatographic workstation

TECHNICAL PARAMETERS

Column Temperature Box	
Column temperature box size	280 x 300 x 180mm
Temperature control range	Higher than the room temperature 5℃ ~ 450℃
Temperature setting	1℃; Program set heating rate 0.1℃
Temperature stability	When the ambient temperature changes 1℃, the variation is 0.01℃
Temperature programmed	Order 7 temperature programmed
Operational column loss compensation (double channel)	
Injection Port	
A variety of injection ports available: filled column injection, shunt/non-shunt capillary injection, temperature programmed cold cylinder inlet	
Hydrogen flame ionization detector (FID)	
Maximum service temperature	400℃
Detection limit	$\leq 5 \times 10^{-12}$ g/s [nC ₁₆]
Dynamic linear range	$\geq 10^7$
Drift	$\leq 5 \times 10^{-13}$ A/30min
Noise	$\leq 2 \times 10^{-13}$ A
Thermal conductivity cell detector (TCD)	
Maximum service temperature	400℃
Sensitivity	≥ 10000 mv. mL/mg [nC ₁₆]
Dynamic linear range	$\geq 10^4$
Drift	$\leq 100\mu$ V/30min
Noise	$\leq 20\mu$ A
Flame photometric detector (FPD)	
Maximum service temperature	250℃
Detection limit	$\leq 2 \times 10^{-13}$ g/s (P) , $\leq 5 \times 10^{-11}$ g/s (S)
Dynamic linear range	$\geq 10^3$ (P) , $\geq 10^2$ (S)
Noise	$\leq 2 \times 10^{-12}$ A
Drift	$\leq 4 \times 10^{-11}$ A/30min
Electron capture detector (ECD)	
Maximum service temperature	350℃
Drift	$\leq 50\mu$ V/30min
Detection limit	$\leq 1 \times 10^{-14}$ g/mL (γ-666)
Dynamic linear range	$\geq 10^4$
Noise	$\leq 20\mu$ A
Nitrogen and phosphorus detector (NPD)	
Maximum service temperature	400℃
Detection limit	$\leq 5 \times 10^{-13}$ g/s (P) , $\leq 1 \times 10^{-12}$ g/s (N)
Noise	$\leq 4 \times 10^{-13}$ A
Drift	$\leq 2.5 \times 10^{-12}$ A/30min
Dynamic linear range	$\geq 10^3$ (P) , $\geq 10^3$ (N)
Photoionization detector (PDHID)	
Detection limit	< 5ppb
Optional configuration	
Counter-control software /GMP pharmaceutical factory special	Automatic sampler B6891N