DRAWELL
Artist of Science

Gas Chromatography DW-GC1290

Features

★ Control system: designed for monitoring and controlling the instrument via the computer.

★ Column Compartment/oven with superior thermal performance, multistage (20 ramps) programmed temperature control function. (supported by "control system")

★ Advanced built-in data acquisition system , supporting real time instrument status monitoring, detection signal acquisition and PC control

★ Column oven supports quick heat-up and rapid cool-down with automated back-door opening.

★ Flexible sample introduction system: 2 sample injectors could be installed and operated simultaneously with independent temperature control.

★ High sensibility and stability detector.

★ 2 independent and analog signals output.

★ M6 software, compatible with GLP/FDA-21 CFR Parti1 requirements and regulations. (electronic records and signatures)
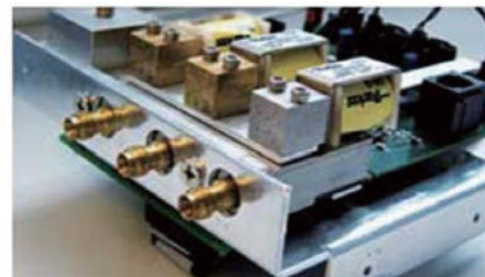
Electronic pneumatics control system

Flow rate: 200ml/min (N2), l000ml/min (He)

Flow rate accuracy: ±5%

Flow rate repeatability: ±0.35%

Split ratio: 0-5000(He), 0-1000(lM2)

Inlet temperature: 0-420℃

Gas chromatography and accessories:

Carrier Gas System + Sample Introduction System + Separation System + Temperature Control System + Detector

Carrier Gas System: air source/ purification and desiccation device/ flow rate control device

Sample Introduction System: sample injector

**Separation System:** chromatographic column(packed column and capillary column)

Temperature Control System (Column Oven): constant temperature and programmed temperature

Detector: FID/ FPD/ NPD

Advanced Microcomputer Control System

★ Superior performance with advanced, microcomputer-based temperature control system

★ High temperature accuracy (optimum ± 0.02℃), high reliability, and anti-interference

★ Self-diagnosis/ self-protection function (overheat protection, power-off protection, etc.)

★ Intuitive display of timing program, detector status, measurement range, current setting, etc
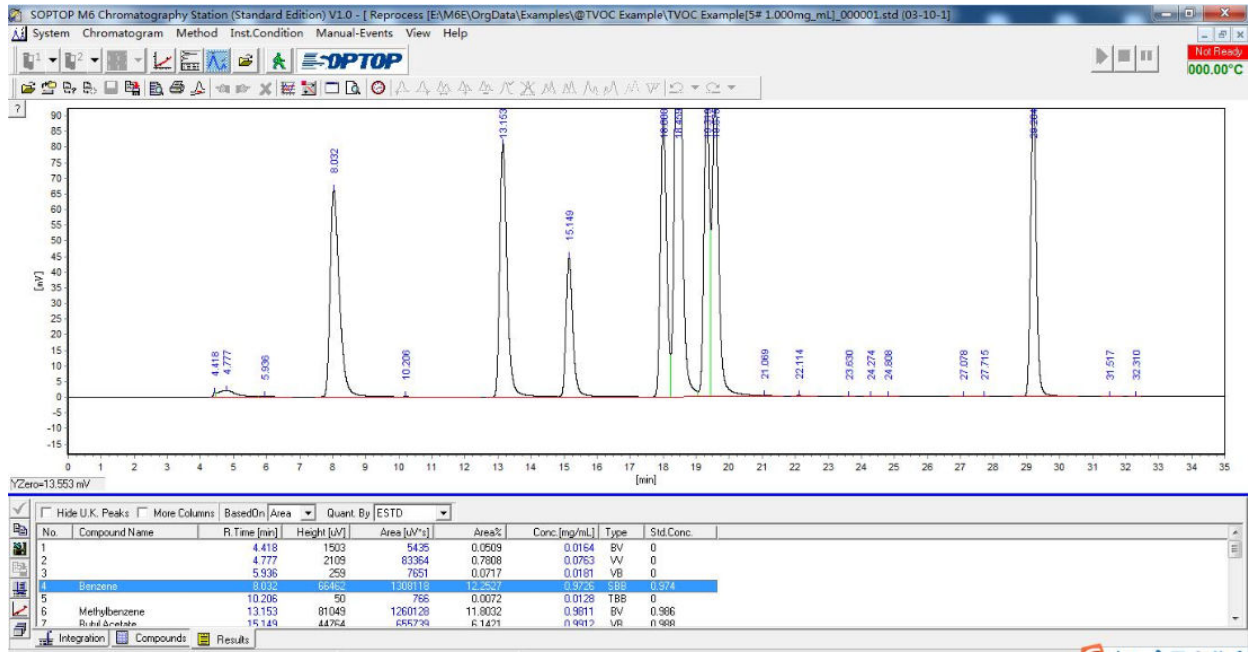
M6 Software interface

Specification

Model#	GC1290	
Description	EPC(electronic pneumatic control) 7 inch touch screen display	
Sample Introduction System	sample injector and evaporation chamber	
Column Oven	Temperature range	Ambient temperature +7°C ~ 420°C (in 1°C increment)	
	Temperature accuracy	± 0.02°C	
	Cooling time	350°C～100°C≤3min, 400°C～50°C in 8-10 min at 25°C ambient	
	Programmed temperature setting	0.1°C~80°C/min (in 1°C increment)	
	Program ramps	20 ramps in total (99 ramps available with control workstation)	
	Size (L*W*H)	284*280*241mm(inside)	340*345*281mm(outside)
Flame Ionization Detector (FID)	Detection limit	≤8×10^{-12}g/s (n-hexadecane)	
	Drift	≤1.5×10^{13}A/h	
	Noise	≤3×10^{-14}A	
	Linearity range	≥10^6	
Thermal conductivity detector(TCD)	Maximum operating temperature	400 ° C	
	Temperature control accuracy	± 0.1 º C	
	Sensitivity	≥10000mv • ml / mg (n-hexadecane)	
	Baseline noise	≤20uv	
	Baseline drift	≤100uv / 30min (after the instrument is stable for 2 hours)	
	Linear dynamic range	≥104	
Flame Photometric Detector(FPD)	Detection limit	≤8×10^{-13}g/s(P) ; ≤8×10^{-11}g/s(S)	
	Drift	≤2×10^{-11}A/30min	
	Baseline noise	≤5×10^{-12}A	
Nitrogen-Phosphorus Detector(NPD)	Detection limit	≤5×10^{-12}g/s（N） (Azobenzene) ≤5×10^{-13}g/s（P） (Malathion)	
Electron Capture Detector (ECD)	Detection limit	≤3×10-14g/ml (γ-666)	
	Drift	≤ 100μV/30min	
	Noise	≤ 40μV	