

# **Gas Chromatography**

#### Features

- ★ Control system: designed for monitoring and controlling the instrument via the computer.
- ★ Column Compartment/oven with superior thermal performance, multistage (10 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 accommodates up to 3 chromatographic columns, and supports quick heat-up and rapid cool-down with automated back-door opening.

(400°C to 50°C in 6 min at 25°C cambient)

- ★ Flexible sample introduction system: 3 sample injectors could be installed and operated simultaneously with independent temperature control.
- ★ High sensibility and stability detector.
- ★ 2 independent and analog signals output.
- ★ Clarity software, compatible with GLP/FDA-21 CFR Part11 requirements and regulations. (electronic records and signatures)
- ★ Special analyzers, like RGA, NGA, PINDA, etc. according to ASTM standards

## Electronic pneumatics control system

Flow rate: 200ml/min (N2), 1000ml/min (He)

Flow rate accuracy: ±5%

Flow rate repeatability: ±0.35% Split ratio: 0-5000(He), 0-1000(N2)

Inlet temperature: 0-420°C



### **◆** Technical parameters

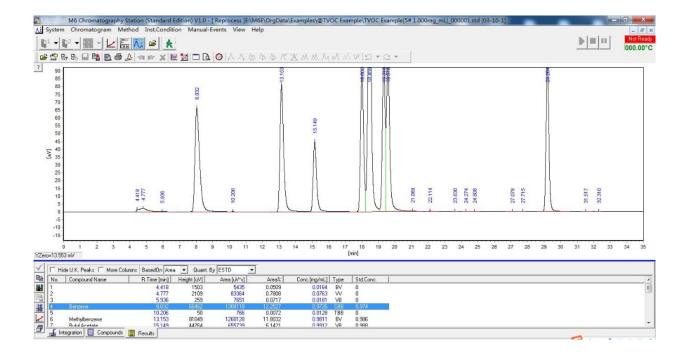
Model#		DW-GC1290
Description		EPC(electronic pneumatic control) 7 inch touch screen display
Sample Introduction System		sample injector and evaporation chamber
Column Oven	Temperature range	Ambient temperature +7°C ~ 400°C (in 1°C increment
	Temperature accuracy	± 0.02°C
	Cooling time	350°C ~ 100°C ≤ 3 min, 400°C to 50°C in 8-10 min at 25°C ambient
	Programmed temperature setting	0.1°C~40°C/min (in 1°C increment)
	Program ramps	20 ramps in total (10 ramps available with control workstation ①)
	Size (L*W*H)	284*280*241mm(inside)340*345*281mm(outside)
Flame Ionization Detector (FID)	Detection limit	≤8×10 <sup>-12</sup> g/s (n-hexadecane)
	Drift	≤1.5×10 <sup>-13</sup> A/h
Thermal Conductivity Detector(TCD)	Noise	≤3×10 <sup>-14</sup> A
	Linearity range	≥10 <sup>6</sup>
Flame Photometric Detector(FPD)	Detection limit	$\leq 8 \times 10^{-13} \text{g/s(P)}$ ; $\leq 8 \times 10^{-11} \text{g/s(S)}$
	Drift	≤2×10 <sup>-11</sup> A/30min
	Baseline noise	≤5×10 <sup>-12</sup> A
Nitrogen-Phosphorus Detector(NPD)	Detection limit	≤5×10 <sup>-13</sup> g/s(P) (Malathion); ≤5×10 <sup>-12</sup> g/s(N)(Azobenzene)

## 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
- $\bigstar$  High temperature accuracy (optimum  $\pm$  0.02°C), 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** 



