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YK-GC6800PLUS Gas chromatograph

The instrument fully absorbs the advanced technology of similar foreign products and adopts advanced manufacturing technology and processes in the domestic industry to ensure the reliability and running time of the instrument. It can not only extend the normal operation time and reduce the number of maintenance times, but also has a more concise and reasonable structure and a more macroscopic appearance. The clear keyboard operation and convenient system anti-control software make it easy to learn and operate. Network GC systems can be equipped with advanced electronic pneumatic control (EPC) systems. The instrument has network remote transmission and control functions, making the instrument unattended, decentralized monitoring, and centralized control a reality; data analysis results can be connected to DCS to complete statistics, analysis, and monitoring of chromatographic component content, and improve the automation of the production process. .

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Performance characteristics

1 Intelligent

1.1※Adopts 8.0-inch LCD capacitive touch display, supports switching between Chinese and English.

1.2 The display screen is intuitive and concise, with real-time display of instrument conditions and status, and touch operations such as setting of analysis conditions and real-time temperature display control.

1.3 The display screen and software interact and control each other. The operation is simple, allowing users to quickly master the operation of the instrument and greatly improve work efficiency.

1.4 ※Network remote transmission and control functions enable unattended analysis, remote monitoring, and centralized control.

2 Automation

2.1 The program supports up to 32 flow path sample selection systems, with automatic identification of valve number, automatic cascade judgment, automatic reset, valve position selection, and valve position analysis memory functions.

2.2 It has fast automatic program heating and fast automatic cooling functions, instrument fault self-diagnosis function, and alarm function.

3 Diversification

3.1 Diversified sampling system; packed column sampling, capillary split/splitless sampling, valve sampling, automatic liquid sampling, fully automatic headspace sampling, pyrolysis sampling, thermal desorption sampling, purge and capture Set injection is optional.

3.2※Up to three detectors can be installed, and there are a variety of detectors to choose from: TCD, HTCD, uTCD, FID, FPD, ECD, NPD, ZD, PDHID, PID, AID.

3.3※ Can be configured with perfect center cutting and valve switching systems to help users complete complex multi-dimensional chromatographic analysis tasks.

3.4 The instrument can realize 8 channels of independent temperature control, 6 channels of external events can be added, and 2 channels of auxiliary control output can be added.

4 Rich networked anti-control workstations

4.1 Communication method: network communication, IEEE802.3 Ethernet interface; the workstation also supports RS232 communication interface;

4.2 The analysis results can be remotely transmitted to the place where the user needs through a variety of transmission methods (Internet, CAN bus, MODBUS bus, GPRS communication, 3G communication, wireless private network, etc.)

4.3 The unique software architecture enables rich configuration of multiple monitoring agents in one system, and a single chromatograph supports simultaneous access by three IP addresses;

4.4※The workstation supports multi-channel data processing of multiple chromatographs. The maximum design supports the connection of 5,000 chromatographs. The data processing of a single chromatograph supports four-channel signal processing, of which the fourth channel is a virtual channel to facilitate the processing of multi-detector signals. Data processing is displayed on a graph and has a baseline straightening function;

4.5※The workstation software can be used to customize the heating zone temperature, heating zone name, enable switch, gas flow and pressure, program pressure increase control,

program heating and external events, automatic sampler, multi-channel sample selection control, Set and control detector and other parameters;

Technical Parameters

1 Sampling system
1.1 Temperature range: 4℃～450℃ above room temperature (increment 1℃)
1.2 Temperature control accuracy: better than ±0.01℃
2 Column oven
2.1 Column oven temperature range: 4℃～450℃ above room temperature (increment 1℃)
2.2 Column box temperature control accuracy: better than ±0.01℃
2.3※Column oven programmed temperature rise: level 23
2.4 Range rising rate setting: 0.1～80℃/min (high speed type)
2.5 Constant temperature time at each stage: 0~999min (increment 0.1min)
2.6 Programmed cooling: It only takes about 6 minutes from 260℃ to 50℃
2.7※Supports double column box and double rear door mode
3 Detectors
3.1 Hydrogen Flame Ionization Detector (FID)
3.1.1 Temperature range: 4℃～450℃ above room temperature (increment 1)
3.1.2 Temperature control accuracy: better than ±0.01℃
3.1.3 Detection limit: ≤3×10-12g/s (n-hexadecane);
3.1.4 Baseline noise: ≤5×10-14A
3.1.5 Baseline drift: ≤1×10-13A/30min
3.1.6 Linear range: ≥107
3.1.7 Automatic ignition (detector temperature is greater than 150℃)
3.2 Thermal conductivity detector (TCD)
3.2.1 Temperature range: 4℃～450℃ above room temperature (increment 1)
3.2.2 Temperature control accuracy: better than ±0.01℃
3.2.3 Sensitivity: S≥3000mV·ml/mg (benzene) (magnification 1, 2, 4 or 8 times optional)
3.2.4 Baseline noise: ≤10μV
3.2.5 Baseline drift: ≤30μV/30min
3.2.6 Linear range: ≥105
3.3 Electron Capture Detector (ECD)
3.3.1 Temperature range: 4℃～450℃ above room temperature (increment 1)
3.3.2 Temperature control accuracy: better than ±0.01℃
3.3.3 Detection limit: ≤1×10-14g/s
3.3.4 Linear range: 104
3.4 Flame photometric detector (FPD)
3.4.1 The top photomultiplier tube has a maximum voltage of -700V;
3.4.2 Maximum operating temperature: 350℃
3.4.3 Detection limit: S≤5×10-12g/s (S in methyl parathion) P≤5×10-13g/s (P in methyl parathion)
3.4.4 Linear range: 105(P) 103(S)

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3.5 Nitrogen Phosphorus Detector (NPD)
3.5.1 Temperature range: 4℃～450℃ above room temperature (increment 1)
3.5.2 Temperature control accuracy: better than ±0.01℃
3.5.3 Detection limit: (N) ≤5×10-12g/s (P) ≤5×10-12g/s

Configuration list

1. 1*gas chromatograph host, including host, chromatographic column, and workstation
2. 1 bottle of high-purity nitrogen, including cylinder valve
3. 1 air compressor
4. 1 hydrogen generator
5. standard products 1 set
6. brands of computer printers

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