

# GC112N Gas chromatograph



#### Technical Features:

- Standard PC side reverse control software, built-in chromatographic workstation, achieve PC side reverse control and host touch screen synchronous bidirectional control. (GC112N only)
- Host with 7-inch color touch screen, carrier/hydrogen/air channel flow (pressure) digital display.
- Gas shortage alarm protection function; Heating control protection function (when opening the door of the column box, the motor of the column box fan and the heating system will shut down automatically).
- Split flow/split ratio can be automatically controlled to save carrier gas.
- Configure automatic sampler installation and positioning interface to match automatic sampler of various specifications.
- The multi-core, 32-bit embedded hardware system ensures the reliable operation of the instrument.
- One-button start function, with 20 groups of sample test mode memory function.
- Using logarithmic amplifier, detection signal no cut-off value, good peak shape, extensible synchronous external trigger function, can be started by external signals (automatic sampler, thermal analyzer, etc.) at the same time the host and workstation.
- It has perfect system self-check function and fault automatic identification function.
- With 8 external event extension function interface, can be selected with various function control valves, and according to their own set time sequence work.
- RS232 communication port and LAM network port, and the configuration of data acquisition card.

# Column temperature box:

• Content product: 22L



- Temperature control range: 5°C ~ 400°C at room temperature
- Temperature control accuracy: ±0.1°C
- Heating rate:  $0.1 \sim 60^{\circ}$ C / min
- Program temperature rise order: 9
- Program heating repeatability: ≤ 2%
- Cooling way: open the door after
- Cooling speed:  $\leq 10 \text{ mins } (250^{\circ}\text{C} \sim 50^{\circ}\text{C})$

Control software function :(GC112N only)

- Column temperature box control
- Detector control
- Injector control
- Map display

## Sampler:

- Temperature control range: 7°C ~ 420°C at room temperature
- Temperature control method: independent temperature control
- Carrier gas flow control mode: constant pressure
- Number of simultaneous installations: 3 at most
- Type of injection unit: filling column, shunt
- Split ratio: split ratio display
- Cylinder pressure range: 0 ~ 400kPa
- Cylinder pressure control accuracy: 0.1kPa
- Flow setting range:

 $H2.0 \sim 200 \text{ml} / \text{min}$ 

 $N2.0 \sim 150 \text{ml} / \text{min}$ 

### Detector:

- FID, TCD optional
- Temperature control: Max. 420°C
- Number of simultaneous installations: 2 at most
- Ignition function: automatic

Hydrogen flame ionization detector (FID)

Detection limit:  $\leq 3 \times 10$  g/s (n-hexadecane)

Baseline noise:  $\leq 5 \times 10\text{-}14A$ Baseline drift:  $\leq 6 \times 10\text{-}13A$ 

Dynamic range: 107 RSD: 3% or less

• Thermal conductivity detector (TCD):

Sensitivity: 5000mV•mL/mg (n-cetane)

Baseline noise: ≤ 0.05 mV

Baseline drift: ≤ 0.15mV / 30min

Dynamic range: 105

• Supply voltage: AC220V±22V, 50Hz±0.5Hz

• Power: 3000W