

GC-2979 Plus

Gas Chromatography



EPCC / PRODUCTS / APPLICATION / SOFTWARE / ACCESSORIES / CONSUMABLES / SERVICES

Analytical Technologies Limited

An ISO 9001 Certified Company

www.analyticalgroup.net

►► Characteristics:

1. Brand-new designed microcomputer temperature control system of world advanced control technology. High accuracy of temperature control (optimum : $\pm 0.05^{\circ}\text{C}$), high reliability and anti-interference.
2. Control and operating parameters (including for detectors) set up by the keyboard. Self-diagnostic system, power-fail protection, fire storage and call limited temperature setting. Accurate display of setting and actual value of temperature control of each path, bridge current of TCD, sensitivity of FID, retention and analysis time.
3. Four paths of independent control sections: column oven, sample injector, detector and thermal conductive pond.
4. 5-ramp programmed temperature rising control. Auto-drop of temperature of column oven (auto-opening the door behind the oven) to a fast cooling.
5. Dual FID provided with options of GC 2979 A-TCD, GC 2979A-ECD, GC 2979 A-FPD and GC 2979A NPD, gas sampling valve, transformation oven, absorber and pyrolysis, absorber available for selection. Two detectors can be installed at the same time with high sensitivity. Short time to be stabilized and easy to clean and install nozzle.
6. Packed column and capillary column (0.53 large diameter or small diameter) can be installed easily including a complete set of split sampling connector and tailing connector to be installed free of charge. Optional 0.53 mm large diameter capillary direct sampler is available for choice.
7. Analysis can be conducted in packed or capillary column with multiple sampling methods.
8. Packed column : on column sampling, instantaneous vaporized sampling and gas sampling.
9. Capillary column : split sampling and 0.53mm large diameter capillary direct sampling.
10. Construction of dual gas path, dual sample injector and dual packed column system can effectively avoid baseline undulation and drift in real time and facilitate programmed temperature rising analysis. Accurate and sealed type gas path control valves will provide a high repeatability and stability.
11. Advanced Functions: auto ON/OFF temperature control system, permanent data storage, file storage and call and over temperature protection.
12. Large volume column ($300 \times 280 \times 270$) can hold capillary column and dual packed column. Built in heating filament structure is in favor of quartz capillary analysis.
13. A complete set of accessories including purifier, pressure reducing valve, gas path tube, wrench and tools, injection needle and connectors of all kinds are provided free of charge and ready to connect with supply-air system prepared by users.

►►► Specifications:

Temperature control

Control range	7°C-400°C above room temperature, (increment of 1°C)
Control objects	column oven, detector, thermal conductive pond and sample injector
Programmed temperature rising	5 ramps
Rate of programmed temperature rising	0.1°C-40°C(increment of 1°C)
Thermostatic time	0-655 min (increment of 1°C)



▶▶▶ FID:

Sensitivity (minimum Testability)
 Optimum testing result
 Noise
 Drift
 Linear range
 Compatible with 1/4", 1/8", 1/16" and capillary Columns
 Flameout Detection
 MDL
 Maximum Temperature
 Flow Setting

$M \leq 5 \times 10^{-11}$ g/s (Sample: C16)
 $M \leq 1 \times 10^{-11}$ g/s
 $\leq 5 \times 10^{-14}$ A
 $\leq 6 \times 10^{-13}$ A/h
 $\geq 10^6$

≤ 3 pg C /sec for C9 HC
 400°C
 Air: 0-400ml/min
 H₂: 0-150 ml/min
 Makeup Gas : 0-150 ml/min

▶▶▶ TCD:

Sensitivity
 Noise
 Drift
 Linear range
 Compatible with 1/4", 1/8", 1/16" and capillary Columns
 MDL
 Maximum Temperature

10micro volt/ppm for Nonane
 $\leq 20\mu V$
 $\leq 30\mu V$
 $\geq 10^4$
 ≤ 800 pg C12/ml He
 400°C

▶▶▶ FPD:

Sensitivity (minimum Testability)
 Optimum testing result
 Sensitivity (minimum Testability)
 Optimum testing result
 Linear range

Stability
 Noise
 Starting Time

$\leq 2 \times 10^{-11}$ g(P)/s (sample P in The parathion methyl)
 $\leq 3.8 \times 10^{-12}$ g(p)/s.
 $\leq 1 \times 10^{-11}$ g(S)/s (sample: S in The parathion methyl)
 $\leq 2.8 \times 10^{-12}$ g(S)/s
 $\geq 10^3$ (sample P parathion)
 $\geq 10^2$ (sample S parathion)
 $\leq 30\mu V/h$
 $\leq 10\mu V$
 not greater than 2 hours

▶▶▶ NPD:

NPD available with ceramic beads and compatible with element-specific sources.

Sensitivity (minimum Testability)
 Optimum testing result
 Sensitivity (minimum Testability)
 Optimum testing result
 Drift
 Noise
 Linear Dynamic Range
 Max application temperature
 Current Setting
 Flow Setting:

Dt(N) < 5pg (N)/s
 5 ppm
 $\leq Dt(p) < 0.5$ pg (p)/s
 0.2 ppm
 $\leq 8 \times 10^{-13}$ A/h
 $\leq 5 \times 10^{-13}$ A
 $\geq 10^3$
 400°C
 1 to 3.5 A

Air: 0-100ml/min
 H₂ : 0.50 ml/min
 Makeup Gas : 0-50 ml/min

MDL:

≤ 0.1 pg n/sec for Methy /parathion
 ≤ 0.5 pg p/ sec for Azobenzene

▶▶▶ Optional accessories:

- 1.TCD
- 2.FPD
- 3.NPD
- 4.CDP-4A data processor
- 5.Software with I/O port

▶▶▶ Overall dimension & weight:

Shipping package dimension
 Net Weight
 Gross Weight

990-630-690mm
 50 kg
 75 kg

HPLC Servicing, Validation, Trainings and Preventive Maintenance :

HPLC Servicing :HPLC Servicing : We have team of service engineers who can attend to any make of HPLC promptly @the most affordable cost.

Trainings :We also take up preventive Maintenance to reduce downtime of HPLC's Trainings.

AMC's/CMC :AMC's/CMC :We offer user training both in-House and at customer sites on HPLC principles, operations, trouble-shooting.

Validations :Validations :We have protocols for carrying out periodic Validations as per GLP/GMP/USFDA norms.

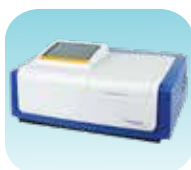
Instruments :Instruments :We offer instruments/Renting Services Modules like pumps,detector etc. on Rent.



About Analytical Technologies

Analytical Technologies is synonymous for offering technologies for doing analysis and is the Fastest Growing Global Brand having presence in at least 96 countries across the global. Analytical Technologies Limited is an ISO:9001 Certified Company engaged in Designing, Manufacturing, Marketing & providing Services for the Analytical, Chromatography, Spectroscopy, Bio Technology, Bio Medical, Clinical Diagnostics, Material Science & General Laboratory Instrumentation. Analytical Technologies, India has across the Country operations with at least 4 Regional Offices, 6 Branch Offices & Service Centers. Distributors & Channel partners worldwide.

Our Products & Technologies



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Spectro 2080+
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Optima Gas
Chromatograph
3007



Optima Gas
Chromatograph
2979 Plus



Flash
Chromatograph



Atomic Absorption
Spectrophotometer



Liquid Particle
Counter



Optical Emission
Spectrophotometer



DSC/TGA



Semi Auto Bio
Chemistry Analyzer



HEMA 2062
Hematology
Analyzer



Micro Plate
Reader/Washer



URINOVA 2800
Urine Analyzer



Total Organic
Carbon 3800



Fully Automated
CLIA



NOVA-2100
Chemistry Analyzer



PCR/Gradient PCR/
RTPCR



TOC
Analyzer



Laser Particle
Size Analyzer



Ion Chromatograph



Water purification
system

Regulatory compliances



Corporate Social Responsibility

Analytical Foundation is a nonprofit organization (NGO) found for the purpose of:



Analytical
Foundation

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2. Improving quality of life by offering YOGA Training courses, Work shops/Seminars etc.

3. ANALYTICAL FOUNDATION aims to DETOXYFY human minds,souls and body by means of yoga, Meditation, Ayurveda, Health Care, Awards, Media, Events, Camps etc.

Reach us @



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