

GCMS-3068

Gas Chromatography - Quadrupole Mass



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

Analytical Technologies Limited

An ISO 9001 Certified Company

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►► **Description**

The GCMS 3068 Series Gas Chromatography - Quadrupole Mass Spectrometer is based on advanced gas chromatography and mass spectrometry technology, it has best-in-class performance.

►► **Features**

● **GCMS 3068 the most sensitive and reliable mass-selective detector including:**

- EI source with extractor lens set for best-in-class sensitivity
- The mass spectrometry signal is enhanced several times, broadening the detection limit of the instrument.
- Higher mass spectrometric sensitivity allows the use of smaller sample volumes, thereby reducing operating costs for transportation, storage, preparation, and waste disposal.
- All-metal quadrupole with pre-quadrupole effectively reduces main rod contamination and keeps the mass analyzer clean.
- A new generation of multiple off-axis detectors for neutral noise elimination
- The MSD interface is controlled by a mass spectrometer and can reach up to 400 °C

● **GCMS 3068 the most sensitive and reliable mass-selective detector including:**

- High-precision carrier gas and temperature control to achieve highly repeatable chromatographic performance
- Rapid equilibrium technology of oven temperature achieves the minimum waiting time between two injections.
- Equipped with intelligent functions such as self-diagnosis, leak detection, gas saving, etc., it is easy to know the status of the instrument.

● **The workstation software inherit classic operation mode**

- Mass Expert acquisition and analysis software is based on the classic operating interface, so users do not need to change their usage habits.
- The batch processing function can automatically perform statistical analysis on sample data and support drawing sample trend charts.

● **Fully inert flow path**

- Ultra-inert flow path from inlet to detector prevents analytes decomposition, resulting in higher reproducibility and increased confidence in results
- Ultra-Inert components include inlets, liners, columns, fittings, and mass spectrometry ion sources

● **Complete system solution**

- Covers diverse sample preparation and sampling equipment for gas, liquid, solid samples, etc. to meet the needs of a wide range of laboratory applications.

►► Installation acceptance indicators

Signal-to-noise ratio installation reference index			
Instrument configuration	Ion source	EI scan signal-to-noise ratio	Sample concentration
GCMS 3068	With extractor lens set	1,500 : 1 (m/z 272)	1p g/ μ L OFN

GCMS Mass Selective Detector (MSD) System specifications	
Ionization mode (standard)	EI
Ionization energy	0-124eV
Emission current	0-300 μ A
Filament	EI source is equipped with double filament
Interface temperature	The maximum temperature is no less than 400 °c
Ion source temperature	The maximum temperature is no less than 350 °c
Mass filter	All metal quadrupole
Mass range	1.5-1100u
Mass resolution	Unit
Mass axis stability	Better than 0.10u / 48 hours
Detector	Multiple off-axis detector with high-energy dynodes and long-life electron multipliers
Dynamic Range	1 0 ⁶
Scan rate	10000u / s
SIM channels	64 ions \times 128 groups
Vacuum system	Turbo molecular pump 250L /s, plus mechanical oil pump 4m ³ / h, or mechanical dry pump 10.8 m ³ / h
Vacuum lock	Equipped with shutdown vacuum quick locking function to reduce the stabilization time of secondary startup
Maintenance convenience	Ion source (including filament and lens), mass filter, and detector are located on removable plates for easy access

Maintenance convenience

The ion source visual window displays the ion source type, filament operation, and ion source connection status

The ion source (including filament and lens) and electron multiplier can be removed from the instrument within one minute after vacuum evacuation.

Data system

Acquisition software	MassExpert
Scanning mode	Supports SCAN , SIM and SCAN/SIM modes
Autotune	One-touch autotune
Data analysis software	MassExpert.Analyse
Analysis report	Built-in smart report templates
Spectral library	NIST
Target deconvolution	Integrated deconvolution and spectrum matching for analysis of lowconcentration targets in complex matrices

Safety and operating conditions

Acoustic emission	Noise < 70db
Power	220V AC , 600 W
Operating environment	15-35 °c, relative humidity 20%-80% - no condensation (during operation)
	-40-70 °c, relative humidity 0%-95% - no condensation (during storage)

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

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Regulatory compliances



Corporate Social Responsibility

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



Analytical Foundation

1. Research & Innovation Scientist's awards/QC Professional Award : Quality life is possible by innovation only and the innovation is possible by research only, hence ANALYTICAL FOUNDATION is committed to identify such personalities for their contributions across various field of Science and Technology and awarding them yearly. To participate for award, send us your details of research / testing / publication at Info@analyticalfoundation.org

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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