

GC-MS 6800 Gas Chromatograph-Mass Spectrometer

- High performance, high reliability
- Low cost for customers of all types
- Holding multiple patents



Gas Chromatograph---Mass Spectrometer

| GC Specifications | |
|---------------------------------|------------------------------------------------------|
| Inlet temperature | Max. 450°C |
| Pressure range | 0~100psi,±0. 002psi |
| Pressure control mode | Electronic pressure control (EPC), support CV and CC |
| Split mode | Split/splitless, max. split ratio: 1000:1 |
| Column oven working temperature | Room temperature+4°C~450°C |
| Heating rate | Up to 120°C/min |
| Temperature programming | 7 stages/ 8 platforms |
| Auto Sampler | Optional |
| MS Specifications | |
| El source ionization energy | 5W ~ 250eV (Adjustable) |
| Mass range | 1.5~1000amu |
| Resolution | Unit resolution (full width at half maximum) |
| Ion source temperature | 100~3500 |
| Filament emission current | 0-350 uA |
| GC-MS Interface temperature | Max. 450°C |
| Stability | ±0.10 amu/48 hrs |
| Sensitivity | Full scan, 1 pg OFN at m/z 272 with S/N ≥30:1 (RMS) |
| Scan rate | Up to 1000 amu/s |
| Vacuum | Turbo molecular pump(67L/s) |
| Detector | High energy dynode electron multiplier |

GC-MS 6800

Gas Chromatograph Mass Spectrometer

GC-MS 6800 is a cost-effective gas chromatograph mass spectrometer. The products hold several patented technologies, and are widely used in industrial inspection, food hygiene, environmental protection, etc.



Current Customers:

- ◆ Industrial inspection: textile, electricity & electronics, plastic cement, cosmetics
- ◆ Food hygiene: pesticide residues, flavors and fragrances
- ◆ Environmental protection: air, water, soil, solid waste
- ◆ Pharmaceutical: pharmaceutical industries, drug inspection
- ◆ Petrochemical: oil refineries, chemical plants
- ◆ Public security organ: explosives, forensic evidence

Highlights:

Hardware

- ◆ Electronic pressure/flow control system (EPC/EFC) for self-developed GC 6800 system
- ◆ Patented EI filament set provides highly efficient electron emission, a maximum of 350u A
- ◆ Quality mass analyzer with pre-filter reduces quadrupole pollution
- ◆ High-energy dynode electron multiplier ensures good sensitivity
- ◆ Vacuum system with quality mechanical and turbo molecular pumps guarantees stability and reliability
- ◆ Full scale gauges monitor vacuum states in real time
- ◆ Self protection system guarantees safety of operators and core parts under abnormal conditions
- ◆ RF power supply digital compensation technology ensures better sensitivity and resolution in full mass range

Software

- ◆ The software "**ChemAnalyst" controls auto sampler (AS), gas chromatograph (GC) and mass spectrometer (MS); data are acquired and transferred by high-speed network card
- ◆ Full Scan and selective Ion Monitoring (SIM) modes are available
- ◆ The system supports manual and automatic tuning, display of total ion current (TIC) and mass chromatogram (MC)
- ◆ It is the only legal distributor authorized by NIST/EPA/NIH in China mainland, which guarantees the latest version and free online up grade of NIST (current version NIST 2011)
- ◆ The data processing section searches target compounds in NIST 2011 based on mass spectra of samples, displays search results which include retention times, structural formula and standard mass spectra, and compares the abundances of standard and real target ions. Users can make accurate qualitative and quantitative analyses

Features:

Superior quality: it uses high-end core parts, which ensures GC-MS 6800 high quality

Meeting high demands: It provides necessity parts, and meets multiple requirements from clients in different fields.

User-friendly design: it facilitates easy operation and convenient maintenance

High-efficiency ionization source: modularization design, we patented ion source, having high ionization efficiency, and enhancing sensitivity

ChemAnalyst software: convenient operation, data acquisition and processing

Highly cost-effective: offering more benefits while meeting all application demands

Scientific solutions: we offer customers perfectly customized solutions

Consumables with favorable price: most consumables and parts are self-developed, which save a lot of maintenance cost, while providing high performance

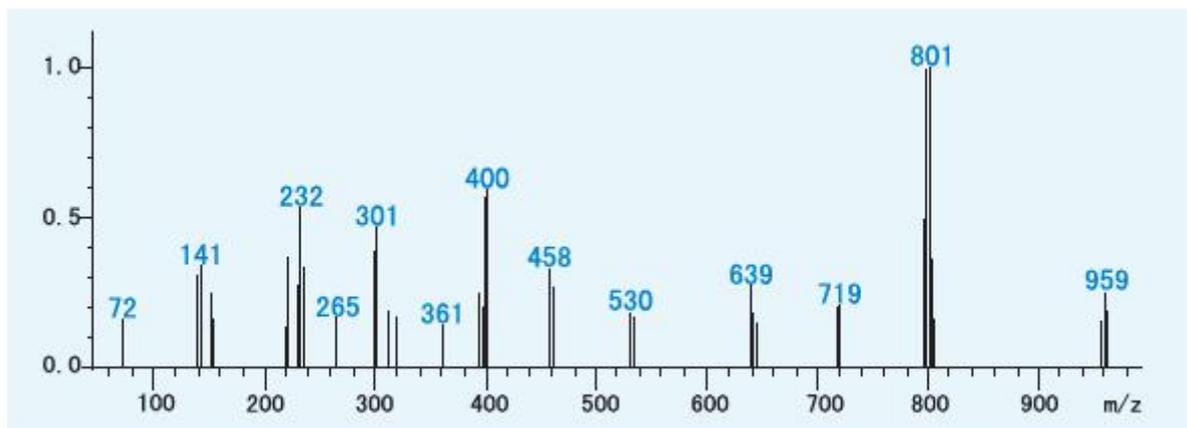
Satisfactory post-sale service: we makes a quick response to client's demands, with professional technicians offering 24-hour services

A Comparison of AELAB GC-MS and Competitors' GC-MS:

| AELAB GC-MS | Competitors' GC-MS |
|---------------------------------------------------------------------------|--------------------------------------------------|
| Highly cost-effective | Expensive |
| Favorable price, low maintenance cost | Imported consumables, high maintenance cost |
| Rapid service response, professional technicians offering 24-hour service | Slow service response, normally more than a week |

Application:

Brominated flame-retardant (BFR), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (RAHs), phthalate, etc.



Mass spectrum of deca polybrominated biphenyl ether

Laws and Regulations:

REACH is a European Union regulation concerning the Registration, Evaluation, Authorization and restriction of Chemicals, which includes all substances and goods imported into EU except those are clearly exempted.

RoHS directive refers to the rules on the restriction of the use of certain hazardous substances in electrical and electronic equipment; it specifies the maximal limitation of six hazardous substances explicitly, with product range almost covering all electronics, electrical appliance, medical products, communication products, toy, security products, etc.