DRAWELL
Artist of Science

GC1290 / MS8100

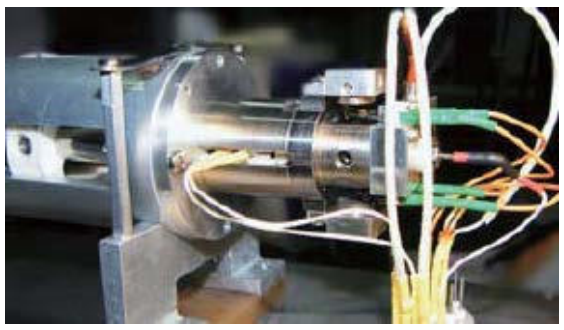
Gas Chromatography-Mass Spectrometer

Features

1. Inlet vacuum
2. Ion Source: EI (electron ionization) standard
3. High performance GC1290 gas chromatography,
   with EPC system and 7 inch touch screen display
4. Clarity software, comply with GLP/FDA-21 CFR Part11

Description

1. MSQ8100 Quadrupole mass spectrometer host
2. GC1290 gas chromatography host
3. Customized Clarity software
4. Column(TG-5MS（30m*0.25mm*0.25um）)
5. Large capacity integrated trap，Used for helium



Ion source

Structure

1. Sample Introduction
2. Ion Source(EI Standard)
3. Quadruple Mass Analyzer
4. Detector(Electro Multiplier)

Quadrupole

Specifications

Data processing system	
Data acquisition and processing platfor	multi-core parallel processing technology and high-speed electronic circuit design
Software	customized Clarity software
SIM/Scan	SIM / Scan Data synchronization acquisition
SIM/Scan Data synchronization acquisition	guarantees full mass range scanning during full analysis time without significant loss of sensitivity
NIST library optional	
Software fully supports GLP/FDA-21CFR Part11 electronic signature certification, data validity security, system certification tool (IQ/OQ) and system suitability test (SST) requirements	

Mass spectrometer	
Ion source	high transmission efficiency Focusing inert EI source
Ion source temperature	50-350 °C
Electronic energy	0-300eV
Filament emission current	0-300μA
Mass filter	quadrupole
Mass range	1.5-1100 u
Mass shaft stability	better than ±0.10 u/48 hours
Detector	Triple off-axis detector with long-life electron multiplier
Full scan mode (SCAN) maximum time unlimited	
The foreline pump uses mechanical pump of not less than 130L/min, and the high vacuum uses turbomolecular pump of not less than 70L/s	

Gas chromatography	
Column oven control system	
Temperature range	5°C ~ 420°C (increment 0.1°C)
Temperature control accuracy of the oven	better than ±0.05°C (measured at 200°C)
Program temperature control	20 ramps / 21 platform program temperature, software operation ramp is unlimited
Maximum rate of program increase	80 °C / min (increment 0.1 °C)
Cooling speed	350℃~100℃≤3min
Carrier gas control system	
Outlet connection method	atmospheric pressure and vacuum mode
Number of carrier gas pressure blocks	3 segments
Carrier gas flow program number	3 segments
Flow range	0～1000mL/min(He, H2)，(Factory default:He) 0～200mL/min(N2,Ar), (Factory default: N2)
Tail blow	0～100mL/min
Reference gas	0～150mL/min
Pressure range	0～100psi
Set resolution	0.01psi
Maximum split ratio	5000:1

Accessories optional

- Auto sampler

AS-20(22 sample places) PAL LSI 850 (54*3 sample places)(From CTC Analytics, Switzerland)

- Eclipse 4760 Purge & Trap Sample Concentrator (From OI, USA)
  Customized for MSQ8100 GC/MS, used for VOCs in water and soil
  4551A (water sample), 4100（water/soil sample） autosampler is optional