# **EV/** Products

GC-MS 3100/3200 Gas Chromatograph-Mass Spectrometer (Quadrupole)
GCxGC TOF MS 3300 Comprehensive Two-dimensional
Gas Chromatograph – Time of Flight - Mass Spectrometer
GC-MS 3110 Mobile Gas Chromatograph-Mass Spectrometer
GC-4000A/4100 Series Gas Chromatograph
EW-4400 Portable PID Gas Analyzer
LC-5500/5510/5520 High Performance Liquid Chromatograph
ICP-1000II Automatic ICP Spectrometer
ICP-7700 ICP Spectrometer
AA-7001/7003/7020/7050/7090 Atomic Absorption Spectrometer
AF-7500/7500B/7550 Atomic Fluorescence Spectrometer
XD-8010 Energy Dispersive X-Ray Fluorescence Spectrometer
XF-8100 Wavelength Dispersive X-Ray Fluorescence Spectrometer
CA-9000 Mobile Lab for Inspection
Coal Mine Analyzers
Data Processing Workstations

## EAST & WEST ANALYTICAL INSTRUMENTS, INC.

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# LC-5510

High Performance Liquid Chromatograph EAST & WEST ANALYTICAL INSTRUMENTS, INC.



# LC-5510 High Performance Liquid Chromatograph

additives analysis.

Functional studies, guality control

Experiments, scientific research and teaching

## **Applications**

HPLC are widely used for the analysis of organic compounds with high boiling points, low volatility, high molecular weights, various polarities, and poor thermal stability. HPLC are used to analyze biologically active substances, polymers, natural polymer compounds, among others.

Medicine and Life Sciences Sanitation and Disease Control Food Processing

> Chemical Industry **Environmental Protection Quality Supervision** Education and Research Other Areas

# Features

#### High automation

Wavelength selection, temperature control and semiconductor cooling are controlled through software.

#### Modular Structure: Attractive and Reasonable Design

#### High-Performance Variable Wavelength UV-Vis Detector

• High sensitivity, low noise and drift

• New optical design, concave holographic gratings provide high repeatability

• Wide wavelength range, multi-wavelength programming, full wavelength scanning with continuous flow, can accurately select optimal analysis wavelength

• R232 data interface

• Long lifespan deuterium lamp, typical lifespan of 2000 hours or more

#### Precise thermostatic column oven

- Large volume oven can accommodate manual injector and any two columns (15 cm, 25 cm, 30 cm).
- Advanced temperature control suitable for low temperature separation of biological samples

• Precise temperature control, temperature display in status panel, overheating alarm and protection (automatic shutdown).

#### Six-Way Valve

Six-way valve injection is compatible with international standards; easy to use, low noise, accurate injection.

## P-101A High-Pressure Pump

Research and development of new drugs, biological functional deconstruction, quality control

Nutritional analysis, functional food research, antimicrobial residues, pesticide residues and

Monitoring water quality, air quality, marine environment, detection of various contaminants

Commercial inspection, quality inspection, import and export inspection and quarantine

Clinical analysis, human biochemical indexes analysis, metabolite analysis

Water plants, power plants, judicial and public security departments

• This dual piston reciprocating high-pressure pump delivers a high precision steady flow. High quality sealing rings are resistant to wear, pressure and corrosion. Patented pulse dampeners ensure effective dampening. Gradient elution is controlled by software.

• Low pulse, large flow range, continuously adjustable flow, high flow repeatability, accessible solvent replacement.

• Features pressure monitoring and safety mechanisms, programmed control of flow and time.

• Easy maintenance: pumps are easy to clean, repair and maintain, plunger rods and seals are accessible for cleaning and easily replaceable. Cleaning plunger rods will minimize abrasion caused by deposition of salt buffer solutions.

#### LC Software

- Easy to use and intuitive, controls pump and detector
- Powerful data processing capabilities that features a variety of quantitative algorithms.
- Strong chromatogram comparison function
- Features calibration curve correction

• High degree of automation: the whole process from data collection to report printing is automated. A series of chromatograms can be saved into files for convenient management.

• Raw chromatogram collection data and related information are recorded in compliance with GLP Standards.

- Flexible design of report output formats
- Set instrument information according to requirements

# **Technical Specifications**

High Pressure Pump		
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Working pressure	0-42MPa	
Flow range	0.001 - 15.00 mL/min (maximum flow 50.00 mL/min, suitable for semi-prep)	
Flow accuracy	RSD < 0.1%	
Gradient range	Isocratic, binary gradient	
Set value error of pump flow	±0.2%	

#### Column Oven

Temperature range	Semiconductor cooling 5°C-80°C (ambient temperature <25°C)
Temperature accuracy	±0.1 C
The oven can simultaneously install two different columns (15 cm, 20 cm, 25 cm, 30 cm)	

# Technical Specifications of the AS-401 Autosampler

Performance Specifications		
Repeatability	RSD < 0.5%	
Linearity	> 0.999	
Residual cross-contamination	< 0.01%	



AS-401 HPLC Autosampler



DM-100/DM-101 Online Degasser

UV-Vis Detector		
Light source	Deuterium lamp	
Wavelength range	190nm~700nm	
Spectral bandwidth	5nm	
Wavelength indication error	±0.2nm	
Wavelength accuracy	≤0.2nm	
Wavelength scanning	Multi-wavelength programming (10 wavelength ranges)	
Range of linearity	> 10 <sup>4</sup>	
Noise	<1×10 <sup>-5</sup> AU (empty cell), <2.0×10 <sup>-5</sup> AU (with mobile phase, dynamic)	
Drift	< 3×10 <sup>-4</sup> AU (empty cell), < 3×10 <sup>-4</sup> AU (with mobile phase, dynamic)	
Cell width	4.5mm	
Minimum detectable concentration	4×10 <sup>.</sup> g/ml (naphthalene)	

Specifications	
Sample positions	2×60 positions, 1.8 mL vials
Minimum injection volume	0.1 µL (250µL standard sample pump)
Injection pump	100 μL, 250μL (standard), 1 mL
Sampling loop volumn	100µL (standard), 20µL, 50µL, 200µL (options)
Switching rate of sampling valve	< 100 ms
Position accuracy	< 0.3 mm
Motion control method	XYZ 3-dimension coordinate system
Injector cleaning method	Inside and outside rinse, no restrictions on rinse times
Number of replicates	No restrictions on replicates
Dimensions	300 (W) × 230 (H) × 505 (D) mm
Power	AC 220 V, 50 Hz
Compatibility	Compatible with all commercial HPLC / IC systems
Temperature range	10 - 40°C
pH range	1-14

# DM-100/DM-101 Online Degasser

#### **Applications**

Compatible to all HPLC, easy to install

#### Features

High degassing efficiency, smooth baseline, no drift, and low noise **Basic Configuration** 

Single-channel, three-channel or four-channel degassing systems are available.

Degasser is available in a horizontal or vertical orientation according to customer requirements.