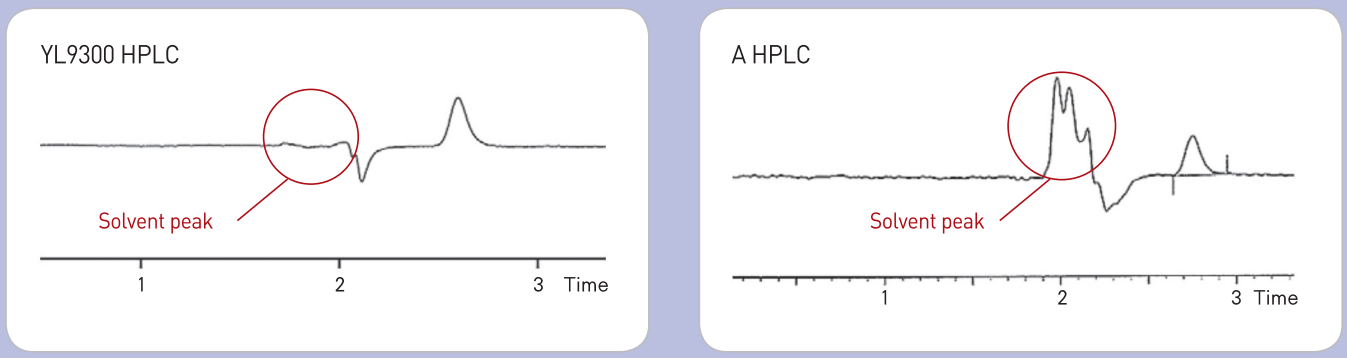
YL9300 HPLC (High Performance Liquid Chromatograph)

YL9300 HPLC is an integrated HPLC system in a compact design including a vacuum degasser (mixer), quaternary pump and UV/Vis detector at a competitive price. The focus corrected optical design efficiently reduces mobile phase RI effect and provides enhanced baseline stability with a substantially minimized noise level especially in short wavelength range, which brings decreased solvent related peaks.



[Comparison of a solvent peak influence]

Compact Design

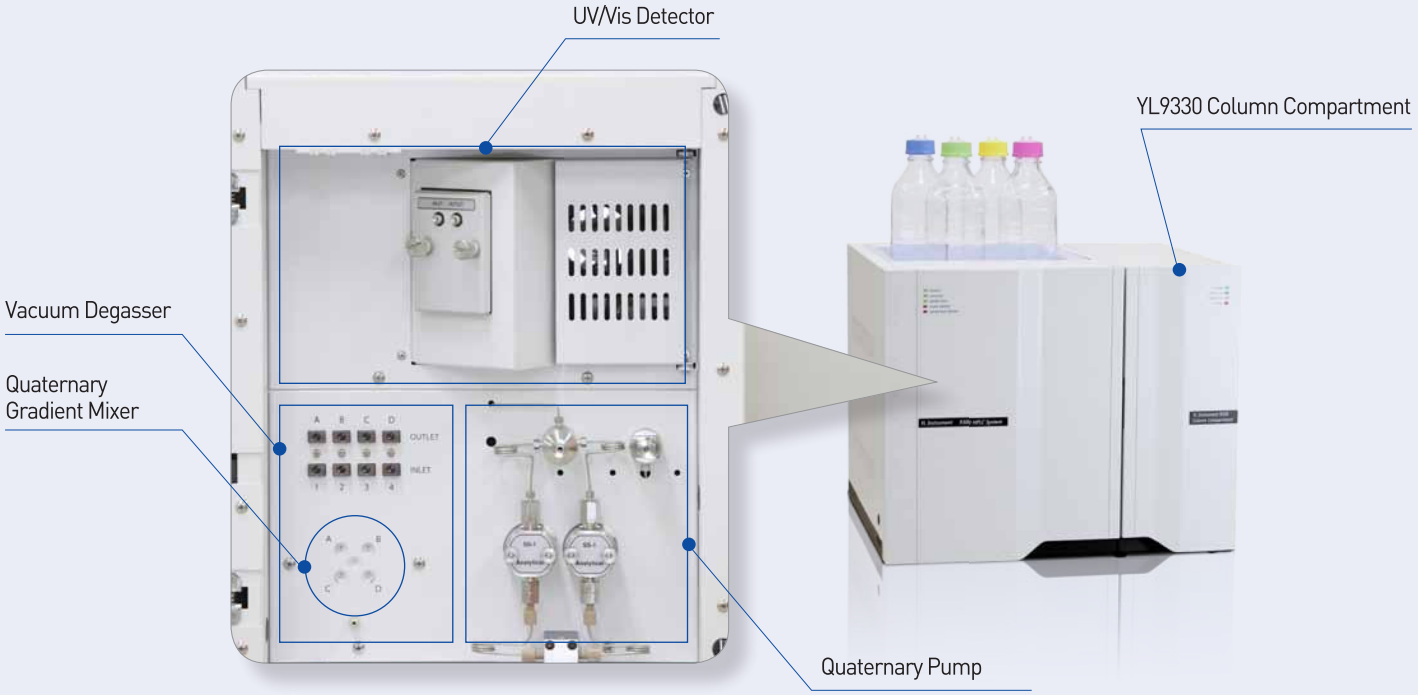
- Integrated LPG(Low Pressure Gradient) HPLC system
- Simple maintenance: Pump & Vacuum Degasser modules in a sliding drawer

Perfect Performance

- Increased mobile phase composition efficiency
- Decreased solvent peak influence
- Narrow spectral bandwidth
- Substantially stabilized baseline with minimized noise level

Impact to Competitors

- Competitive or even lower price than others
- High speed data process by network (LAN) communication
- Low maintenance cost



Vacuum Degasser

- Number of channel: 4 CHs
- Maximum flow rate: 10 ml/min per channel
- Internal volume per channel: 925 ul per channel
- Solvent contact materials: Teflon AF, PEEK and Glass-filled PTFE

Quaternary Pump

- Flow range: 0.001-5 ml/min (Standard)
  0.001-10 ml/min (Option)
- Flow rate accuracy: ≦ ±1% at 1 ml/min
- Flow rate precision: < 0.1% RSD at 1 ml/min
- Number of eluent lines: 4
- Pressure pulsation: ≦ ±0.5 % at 1 ml/min

UV/VIS Detector

- Wavelength range: 190~600 nm (Standard) /190~900 nm (Option)
- Spectral bandwidth: 5 nm
- Wavelength accuracy: ±1 nm
- Wavelength precision: ±0.1 nm
- Linearity: > 99.5% at 2.5 AU (Acetone, 254 nm)
- Noise level: < ±0.35 X 10^{-5} AU, 254 nm, dry cell
- Drift: < 1 X 10^{-4} AU/hour

System Information

- Data communications: LAN
- Dimension: 375 X 470 X 545 mm (W X H X D)
- Weight: 27 Kg
- Safety & maintenance: Leak detection, Diagnostics, Error detection
- Power consumption: 150 W

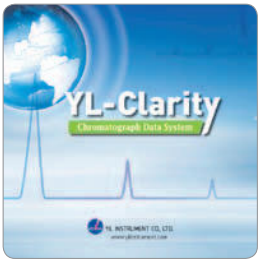
YL9330 Column Compartment

- Temperature range : 4°C (Cooling) - 90 °C
- Temperature stability : ±0.05°C
- Temperature accuracy : ±0.5°C, with 2-point temp. calibration
- Temperature programs : 40 Steps
- Column capacity : three columns up to 300mm length
  (max OD: up to 18mm)
  Column switching (Option): automatically 6-port SS(PEEK)
  valve up to 2 ea
- Communications: LAN
- Safety & maintenance : Leak detection, Diagnostics,
  Error detection
- Dimensions : 185 x 476 x 480mm (W x H x D)
- Line Voltage : 100-240VAC, ±10%, automatic voltage selection
- Line frequency : 50/60Hz, ±5%
- Power consumption : 150W

Powerful and Intuitive Control

• Features

The sophisticated YL-Clarity and Autochro-3000 data system are easy to use and offer extensive data management plus full control of the entire YL9100 HPLC products and YL6500GC. The software is designed for 21 CFR Part 11 Compliance and through full compatibility with MS Windows OS seamlessly handles data processing and instrument control using an ultra-reliable LAN interface.



21 CFR Part 11 compliance

User accounts

YL-Clarity sets up access rights and passwords (including their parameters e.g., minimum length, validity, etc.). Each user can define the appearance of their own station.

Audit trail

It records selected events and operations into a special file and selected operations directly into a chromatogram.

Electronic signature

Each chromatogram can be signed electronically. Signature selection is based on the username or the signature certificate.

Data Acquisition

Overlay

YL-Clarity simultaneously displays a virtually unlimited number of chromatograms and their mathematical modification; for example, mutual deductions or derivations of any order.

Measuring

Simultaneous data acquisition from up to four independent chromatographs, each chromatograph can acquire data from up to 12 detectors.

Reliable and Convenient Data Management

Integration

There are extensive possibilities to optimize integration. The integration parameters can be changed by entering global parameters or interactively, through direct graphic modification of the baseline.

Calibration

Internal and external standard calculation methods, calibration of groups of peaks and reference peaks method for better identification.

Post run

YL-Clarity automatically displays, prints, exports and starts other programs after the completion of a measurement.

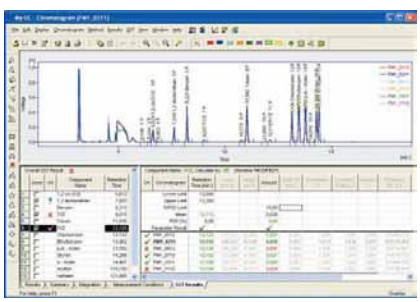
User calculations

Users can define custom calculations in the Result and Summary tables. Using the integrated editor you can create your own columns from original columns and individual mathematical functions.

Optional Module (YL-Clarity)

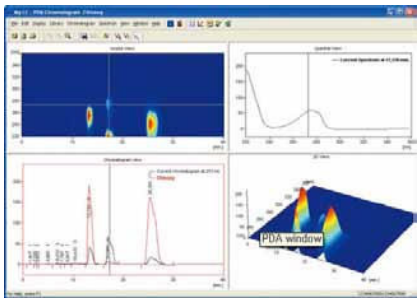
SST (System Suitability Test)

The program compares up to 12 selected parameters calculated according to one of three pre-selected methods (USP, EP, and JP). These calculated values are either compared to the users set limit values for each chromatogram separately or together for the selected series.



PDA Extension

This is to process data that has been acquired from selected photo diode array detectors. The spectral data, together with chromatograms, adds a third dimension to analytical data analysis.



GPC Extension

This provides interactive and automated GPC analysis, including recalibration and GPC reporting, as well as simplifies the retrieval of GPC data.