

DLC-20S Isocratic HPLC with Variable Wavelength Detector



No Frills HPLC at an affordable price !!

D-STAR INSTRUMENTS presents the flagship of its new line of high performance, isocratic liquid chromatography systems. It includes a variable wavelength UV-VIS detector, pump and injection valve. These units are very price competitive in today's market.

The DLC-20S offers the best price/performance ratio in the industry. And in today's economy, isn't that what is important? You need performance that meets your requirements at a price that meets your budget.

Why waste money on performance specifications and features that you will never use ?

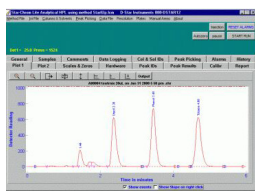
Important DLC-20S Features

- Complete UV-VIS operation from 195nm to 800nm (with optional tungsten lamp).
- Double beam optics (Reference and Sample Paths).
- Analytical flowcells are standard; prep and microbore are also available.
- Sensitivity levels available for over 95% of all applications.
- All wettable components are constructed of Stainless Steel, PEEK, CTFE, Tefzel, and Quartz, bio-compatible systems are available.
- Flow rate from 0.01 to 9.99mL/min. 3,500psi (higher pressures capabilities available).
- Through-the-handle low dead volume injection valve.
- Analog outputs for absorbance and wavelength available at rear of instrument.
- Contact closure output for data acquisition start.

The **DLC-20S** is available with three software options. When packaged with our stand-alone Star-Chrom LITE you have a simple, easy to use package with data acquisition / data integration without unnecessary bells and whistles.

The **DLC-20S PLUS** has Star-Chrom LITE built into the system so that there is no additional box. Just add a computer and you have a completely automated HPLC system. In addition to what is included with Star-Chrom LITE, we add pump control with pressure transducer and wavelength control of the detector.

The **DIS-20S** includes the full Star-Chrom HPLC software and interface box. Just add a computer and you have a completely automated HPLC system. This includes pump control with pressure transducer and wavelength control of the detector, second channel detector acquisition, autosampler and accessory interface. Also, this system can be upgraded to gradient operation.



DLC-20S with software



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DLC-20S Specifications

Detector Specifications:

Wavelengths: 195 to 800 nm

Lamps: Standard - Deuterium (D2) (195-360 nm)

Accessory - Tungsten (W) (360-800 nm)

Flowcells:

Analytical: 7mm pathlength, 10ul volume, 200 psi; wetted materials:

SS or PEEK, quartz or sapphire, Tefzel, CTFE; 1/16" O.D. tubing.

Preparative: 2.0 mm pathlength, 4 ul volume, 1500 psi; wetted materials:

SS or PEEK, quartz or sapphire, Tefzel, CTFE, 1/8" O.D. tubing.

Microbore: 5mm pathlength, 1.5ul volume, 200 psi; wetted materials:

PEEK, quartz or sapphire, Tefzel, CTFE; 1/32" O.D. tubing.

Linearity: Better than 2%

Wavelength Accuracy: 2 nm

Wavelength Reproducibility: 1 nm

Spectral Resolution: 5 nm

Stability (Drift): Less than 2.5×10^{-4} AU/Hr (at 254 nm and constant temperature)

Noise: Less than $\pm 2.5 \times 10^{-5}$ AU (5x10-5AU peak to peak) at 254nm and constant temperature

Recorder Output (A): 10mV

Integrator Output: 1.0 V/AU to 2V (Equivalent to 2.0 AU)

Display: Absorbance: 4.5 digits to 1.999 AU

Wavelength: 3 digits for operating range 195-800 nm

Recorder Absorbance Ranges: 0.005, 0.01, 0.02, 0.05, 0.10, 0.20, 0.50, 1.0 AU

Front Panel Controls: Wavelength selection, Range selection, Autozero, Event Mark

Rear Panel Controls: Subminiature D-type, 15 position female connector for detector recorder/ integrator output, and remote control (Wavelength Up/Down, Event Mark, Autozero, Lamp On/Off, Sample/Reference Energy), Pump control cable

Pump Specifications:

Flow Rate: 0.01 to 9.99 mL/min

Pressure: 0-3500 PSI for 10 mL head (SS or PEEK) [Option "P" version: 0-5000 PSI SS only]

Flow Accuracy: 3% for flowrates of 0.33 mL/min and above; 0.01 mL/min for flowrates below 0.33 mL/min

Seal Flush: Continuous flush of piston seal to minimize buffer problems

Precision: 0.5% RSD

Controls: Flowrate display; Run/Stop Key, Scrolling Keys for increasing/ decreasing flow rate; Prime Key; Pump Run Status LED; Compressibility (on detector module)

Rear Panel: 6 pin RJ-11: RS-232 for remote pump control, DB-15F for Detector control cable

Power entry module: 110/115, 220/230V factory preset

Integrated Prime/Purge Valve: PEEK with 0.0625" port diameter and fittings; 5000 PSI; wetted materials: Stainless or PEEK, CTFE™ and Tefzel

Pulse Damper: Mobile phase in contact with damper: 1.2 mL at 6000 PSI; wetted materials: Stainless or PEEK and inert diaphragm; compressible fluid: isopropanol

Pressure Transducer: Rated to at least 10,000 psi (included with "Plus" and DIS versions)

Injection Valve: Stainless or PEEK ; 20 uL sample loop; position sensor (event); Through-the-Handle Sample Injection Port; user changeable sample loops

Models Available:

DLC-20S, DLC-20SP, DLC-20S PLUS, DLC-20SP PLUS, DIS-20S, DIS-20SP



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