



ACCQPrep™ HP150

PREPARATIVE HPLC SYSTEM

ACCQPrep™ HP 150

Achieve High Performance Preparative
Liquid Chromatography (HPPLC)
simply, without compromise.

Standard System Features

- Flow rates from 1 to 150 mL/min allows analytical scouting and Prep methods on one system
- Operating pressure up to 6,000 psi
- Choice of UV or UV-Vis plus ELSD and MS options
- One touch Focused Gradient Generator minimizes purification time while maximizing sample recovery
- Complete control of the system on one screen
- Lifetime of free software upgrades

The Teledyne ISCO ACCQPrep™ HP150 is designed to be intuitive and easy-to-use with all the performance and accuracy of an HPLC system. The system focuses on purification with the highest sample recovery.

With ease of purification in mind, the user-friendly ACCQPrep HP150 eliminates unnecessary and complex method parameters found in many of the HPPLC systems in today's market. Our PeakTrak® software, designed with the user in mind, is the basis for controlling the ACCQPrep HP150. The integrated software, eliminates the need for a stand-alone PC. This results in a more compact unit with a touch screen interface. Software evolves with user needs and updates are always free.

Enjoy the confidence associated with Teledyne ISCO's active solvent and waste level monitoring, which reduces the risk of solvent spills. In addition, never miss or overfill test tubes again with RFID collection racks.

The ACCQPrep HP150 creates high accuracy gradients and low dwell volumes using dual piston, high pressure pumps. Operate across the full range of flow rates from analytical (1 mL/min) to 50 mm and larger preparative columns (150 mL/min), without the need to switch out pump heads. Save method development time by running a scouting method on an analytical column, and scale up to prep on one system, with a single touch.

Compact Space Saving Design

- Uses minimal bench space with built-in fraction collector and integrated touchscreen.

Powerful Easy-to-Use PeakTrak Control

- Intuitive PeakTrak software minimizes the learning curve, enabling the user to efficiently complete their purification, saving time and solvent consumption.
- Log in through a network connection and control the separation from your desktop.

One Screen Operation

- Start a separation in seconds. Choose a column, press play, load your sample, and walk away.
- On-the-fly chromatographic changes are easy to make on the touchscreen, even during the run.

Column Selector Valve (CSV-4 Optional)

- Users can run samples on up to four different columns containing different media or different dimensions based on sample size needs.

Active Solvent and Waste Level Sensing

- Never run a column dry or overfill a waste container

Rack Sensing

- System reads the RFID rack and sets the fill volume avoiding tube overfills or missed tubes
- Supports a variety of collection rack sizes so that purified compounds can be collected in volumes appropriate for the column size being used

Photo Diode Array Detection

- UV and UV-Vis detectors use PDA technology
- Display spectra in real time or post run
- Collect based on purity indicators

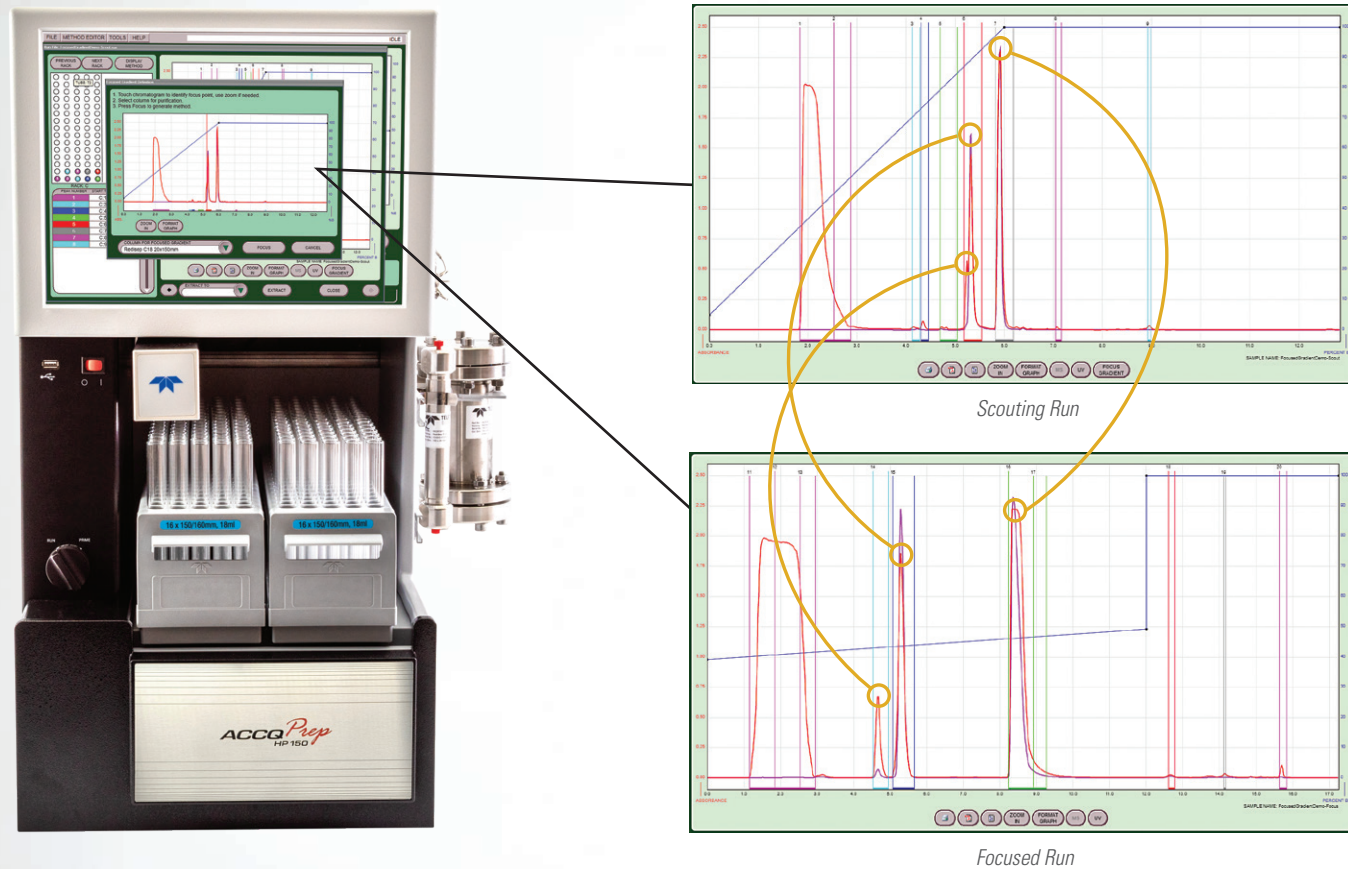


Focused Gradient Generator

Improved Resolution is One Touch Away!

Save time and solvent while increasing column loading.

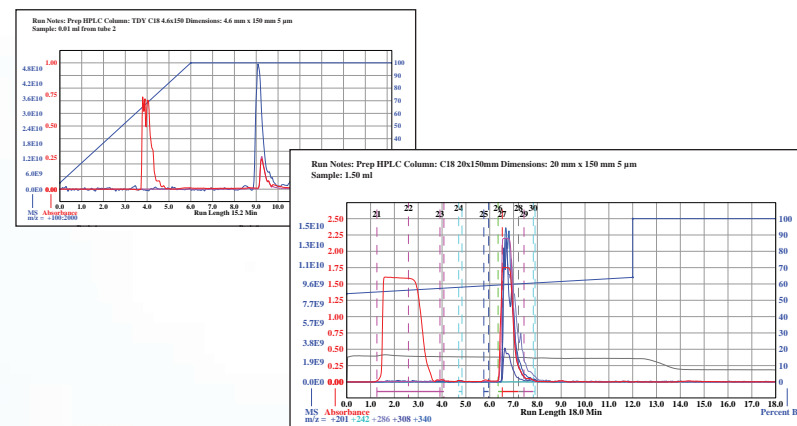
Designed to allow quick method optimization to get to your purified product by every chemist. Run a single scouting run, then use our exclusive Focus Gradient feature, where you are a touch of the peak away from an optimized gradient that maximizes efficiency and resolution around your target compound. This method is automatically scaled up to the column size (of matching media) of choice. Seamless integration with our Purlon MS confirms you have selected the right peak to optimize.



Focused Gradient Generator paired with the Purlon Mass Spectrometer

Easy to Use Method Optimization Right the First Time!

No more guessing which peak is your compound! Coupling a scouting run with MS data means you can now have confidence that the separation is optimized for your target compound. Getting things done right the first time, saves money, solvent and most importantly time.

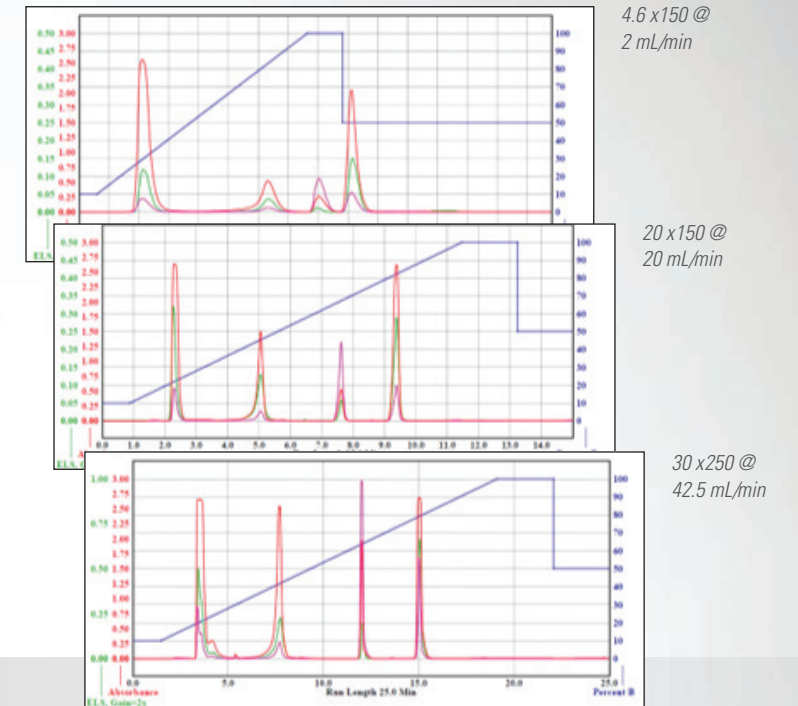


Use of Focused Gradient Generator and Purlon MS to scale up purification of peptide from 4.6 x 150 mm column to 20 x 150 mm column.

Integrated ELSD

Collect weak UV absorbing compounds with certainty.

- Fully-integrated into the ACCQPrep with no additional bench-space needed.
- Offers scalability and sensitivity for a wide range of sample loading with easy-to-change method parameters.
- Peak alignment automatically adjusted for varying solvent mixtures and different flow rates.
- Alignment from 2 to 150 mL/min with no user-hardware changes.



No Chromophore— No Problem with our ELSD and MS modules!

Mass-Directed Preparative HPLC

Verify before you purify!

The Purlon Mass Spectrometer is fully integrated with Teledyne ISCO's PeakTrak[®] software. The ability to manually inject samples prior to purification and collecting based on mass(es), makes this Mass-directed ACCQPrep system ideal for many applications.

- Using the Method Development screen, easily adjust loading and ionization settings before committing your valuable sample for purification.
- Use IonFinder to easily pick out more abundant MS-adducts of your unique compounds.
- Use Terminate on Target to shorten your separation after your desired mass is detected to save solvent and time.
- Collect on up to 6 masses or 5 masses and a mass range



Maximize the throughput and flexibility of your ACCQPrep system by adding **automation** options for longer unattended operation.

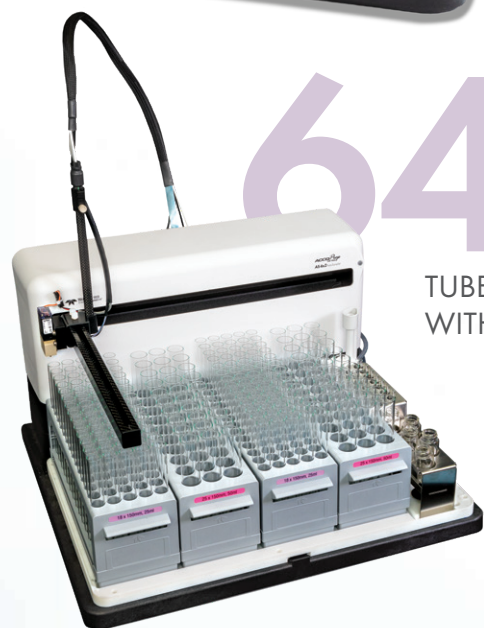


432

TUBE CAPACITY WITH AS 2x2*

Unlimited rack swapping with AutoSamplers

The two rack AS 2x2 and four rack AS 4x2 sampler options allow different chromatographic conditions to be applied to a variety of different samples and doubles or triples the fraction collection capabilities of the base system.

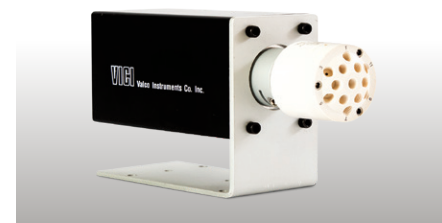


648

TUBE CAPACITY WITH AS 4x2*

*13mm tubes

Accessories for everyday simplicity



Waste Collection Switching Valve

Interfaces with AS 2x2 and AS 4x2. Directs waste from up to 12 samples into separate waste reservoirs. Ideal for open access to separate individual sample wastes. Requires presence of either the AS 2x2 or AS 4x2.



Third Solvent Modifier Pump

Controlled via PeakTrak and provides delivery of a third solvent at a fixed percentage during the purification.

Solvent Select Valve

Easily change your chromatographic selectivity by changing to a different solvent system. The 3 x 2 solvent modifier allows any combination of 3 different A solvents with 3 different B solvents.

Column Select Valve

Change between up to 4 different installed columns with the CSV-4 module. Fully integrated automation with PeakTrak makes changing stationary phases or sizes a breeze.



Large Volume Sample Load Pump

Perfect for peptides and natural applications dilute samples. Inject volumes of samples greater than 10 ml directly onto the column bypassing the injection loop. Pump control is integrated with PeakTrak.



RediSep Prep HPLC Columns

Maximize Your Preparative HPLC Performance

When you need the highest purity compound, your first choice should be to equip your ACCQPrep HP 150 with RediSep Prep columns. Teledyne ISCO has built a quality reputation on the high performance of our flash purification columns. RediSep Prep columns are specifically designed for high performance preparative liquid chromatography (Prep HPLC).

Features:

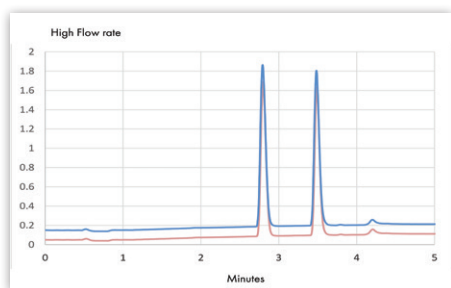
- Prep column diameters ranging 10 to 50 mm with lengths of 150 and 250 mm, all in 5 µm media.
- Available matching UPLC (2 x 50 mm, 2.8 µm) and analytical HPLC (4.6 x 150 mm, 5 µm) columns for method development.
- Available stationary phases include bare silica, C18, C18Aq and C8 chemistries. All matching available flash stationary phase chemistries.
- Protect your column investment with our 20 x 30 mm guard columns with matching stationary phase.

Purification, Performance, and Reproducibility without Compromise

Start with the binary gradient base system or add the optional solvent selection valve to allow selection from six solvents. The minimal gradient delay design allows purification method development on the ACCQPrep HP150 using a 4.6 mm analytical column. The method can be automatically scaled to a larger preparative column.

Performance Without Compromise

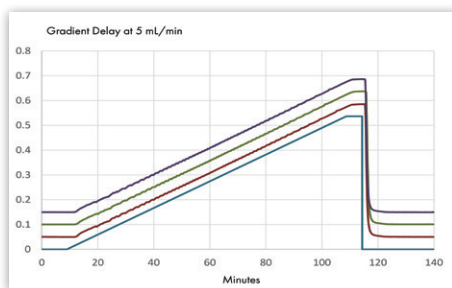
Graph 1 illustrates no compromise in performance even when the system is operating close to the maximum system pressure of 6000 psi and running flow rates that are higher than ideal.



Graph 1 – Mixture of methyl and propyl paraben run on a 10 x150 mm column at 19 mL/min with a pressure of 5,000 psi

Gradient Reproducibility

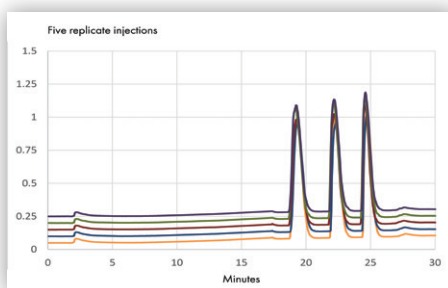
Graph 2 compares the programmed gradient against the profile obtained from three consecutive runs at 5 mL/min. The gradient closely follows the programmed profile, indicating minimal delay volumes, and the reproducibility is unmatched.



Graph 2 – Gradient Delay
This gradient reproducibility results in repeatable chromatographic runs

No Need for Temperature Control

Graph 3 shows five injections overlaid using a test mixture of ethyl, propyl, and butyl paraben. There is minimal retention time shifts over a three hour period without the use of any temperature control.



Graph 3 – Five Injection Test

Going Green and Saving Time in the Laboratory

One of the important principles towards greener chemistry and processes is to “Maximize Efficiency: Meet Need, Minimize Excess.” One of the ways the new ACCQPrep HP150 helps users implement this principle is with the new Focused Gradient Generator. The use of optimized gradient methods maximizes efficiency (allowing purification with larger sample loadings) minimizing both the waste output and the amount of solvent used, all while saving user time. The use of focused gradients eliminates the need for over 80% of the default gradient profile where the compound is not moving down the column or already eluted off.

Reducing waste in our Chromatography line is just another way we are using our innovative products to increase productivity while improving the quality of life on our planet.

Teledyne ISCO

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Teledyne ISCO is continually improving its products and reserves the right to change product specifications, replacement parts, schematics, and instructions without notice.



ACCQPrep™ HP150

Preparative HPLC

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ACCQPrep™

HP 150

- **Straightforward**
Complete control of the system on one screen
- **Compact**
Designed to take up minimal lab space
- **Flexible**
Add on Teledyne ISCO Automation Modules and other sample injection and detection options for your separation needs

Standard Features:

- Flow rates from 1 to 150 mL/min allows scouting and Prep methods on one system
- Operating pressure up to 6,000 psi
- Choice of UV or UV-Vis plus ELSD and MS options
- One touch Focused Gradient Generator maximizes purification time and sample recovery



The system is ready for hours of unattended operation when combined with optional automation modules.



Purlon Mass Spectrometer takes the guess work out of your purification routine with mass directed fractionation.

ACCQPrep™ HP150

Flow Rate Range:	1–150 mL/min
Pressure Limit:	Up to 6,000 psi (400 bar)
UV and UV-Vis Detection:	Variable UV 200–400 nm, Variable UV-Vis 200–800 nm (optional)
ELSD Detection:	Integrated Option
Number of Solvents:	Binary gradient, 2 solvents, 2 x 3 solvents (optional), Fixed third solvent modifier (optional)
Gradient Formation:	High pressure, dual piston reciprocating pumps
Programmable Gradients:	Linear, step, isocratic
Gradient Linearity:	+/- 1%
Sample Introduction:	Injection loop (standard) Manual (standard) Autoinjector (optional) Large sample load pump (optional)
User Interface:	15 in touchscreen, internal CPU, Linux Red Hat
Fraction Collector:	Internal, External Fraction Collection with AutoSampler (Optional)
Dimensions ACCQPrep:	(H x W x D) 27.5 x 14.0 x 20.0 in (69.9 x 35.6 x 50.8 cm) 84.5 pounds (38.2 kg)
Dimensions AS 2x2 AutoSampler Module:	(H x W x D) 18.9 x 14.0 x 19.3 in (48.0 x 35.6 x 49.0 cm) 31.1 pounds (14.1 kg)
Dimensions AS 4x2 AutoSampler Module:	(H x W x D) 27.5 x 23 x 22 in (69.9 x 58.4 x 55.9 cm) 42.2 pounds (19.1 kg)

Selection Information

ACCQPrep HP150 Systems

ACCQPrep HP150 System with 200-400 nm – UV PDA detector	685230053
ACCQPrep HP150 System with 200-800 nm – UV-Vis PDA detector	685230054

Factory Installed Options

Integrated ELSD, factory installed	605237135
ACCQPrep AS 2x2 – AutoSampler Module Factory Installed with sample load and collection racks, includes the AI-5 (685237101) 2 racks, (75) 16 mm tubes/rack	685237127
ACCQPrep AS 4x2 – AutoSampler Module Factory Installed with sample load and collection racks, includes the AI-5 (685237101) 4 racks, (75) 16 mm tubes/rack	685237140
ACCQPrep AI 5 – Autoinjector Factory Installed	685237098
ACCQPrep CSV 4 – Column Selector Valve Module Factory Installed	685237099
ACCQPrep SSV 2x3 – Solvent Selector Valve Module Factory Installed	685237100

User Installed Options

Large Volume Sample Load Pump	685237131
Waste Collection Switching Valve	685237132
Third Solvent Modifier Pump	685237136
ACCQPrep AI 5 – Autoinjector User Installed	685237101
ACCQPrep CSV 4 – Column Selector Valve Module User Installed	685237102
ACCQPrep SSV 2x3 – Solvent Selector Valve Module User Installed	685237104

Mass Directed Options

Mass Spec “S” with Fluid Interface	685237083
Mass Spec “L” with Fluid Interface	685237084
APCI Ion Source for Base, S and L Mass Spec options	250000125
ESI Ion Source for Base, S and L Mass Spec options	250000129



Large Volume Sample Load Pump

Used for injecting volumes of samples greater than 10 mL directly onto the column bypassing the injection loop. Pump is controlled via PeakTrak.



Waste Collection Switching Valve

Interfaces with AS 2x2 and 4x2. Directs waste from up to 12 samples into separate waste reservoirs. Ideal for open access to separate individual sample wastes. Requires presence of either the AS 2x2 or AS 4x2.



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