

HUMAN HEALTH

ENVIRONMENTAL HEALTH



REACH FOR MORE  
**CHOICES**  
IN LC ANALYSIS.



**FLEXAR™ Liquid Chromatography**  
Conventional LC / Ultra High Performance LC  
Flexar / Flexar FX-10 / Flexar FX-15

  
**PerkinElmer®**  
*For the Better*





NOW THERE'S  
A SOLUTION  
FOR ALL YOUR  
APPLICATIONS.



# GO AHEAD, CHOOSE YOUR DREAM LC SYSTEM.

Do you want conventional LC or ultra high performance? 6,000, 10,000 or 18,000 psi? UV/Vis or Fluorescence detector? With the flexible new Flexar, a world of exciting choice is at your fingertips. Not only do you get the widest selection of LC instruments, operating modes and performance levels, you can also choose from a broader offering of pumps, detectors, autosamplers and other accessories.

And take your pick: the new Chromera® CDS or TotalChrom®? With the powerful, easy-to-use Chromera control and data handling software, you get a greater range of configurations than ever before. So, now you can decide which solution is best for your application. All those choices. Sweet.

**Only PerkinElmer gives you the most complete line  
of LC solutions for all your applications.**



**FLEXAR LC / FLEXAR FX-10 / FLEXAR FX-15**



## FLEXAR FX-15



### Ultimate performance. Sometimes you just want more.

Ultra high performance means the highest resolution, highest sensitivity and fastest analysis – in other words, a superlative LC system. Flexar FX-15 is the ultimate in UHPLC with maximum throughput and minimum stress for you. Getting more sample information in less time lets you be more productive. Just what you want.

- **Dual-reciprocating piston 18,000 psi pump** provides as much as 10x or more improvement in productivity
- **Integrated piston wash function** keeps pump pistons clean, even with buffers
- **Synchronized injection with piston position** for ultimate precision. High-speed FX UV/Vis (100 pt/sec) with high-efficiency 2.4  $\mu$ L flow cell
- **View pump pressure profiles real-time** with Chromera CDS



FX-15 pump delivers precise flow for retention time repeatability.

### Reach for ergonomic efficiency

Everyone working with liquid chromatography recognizes the challenges of optimizing tubing connections between individual LC components. Flexar's elegant ergonomic design provides convenient and efficient tube management. Securing clips (highlighted in yellow above) in all four corners of every Flexar component assure maximum flexibility and optimized chromatography.





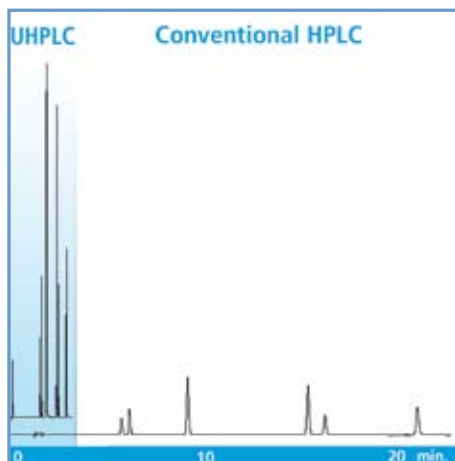
## FLEXAR FX-10



### High value or high performance? Why not go for both?

When the demands in your lab go up, but your budget doesn't, you need excellent performance at the best possible price. Flexar FX-10's 10,000 psi capability lets you increase your throughput while keeping your bottom line steady.

- **Minimal disruption** in your method development phase and analytical approach so you can easily port your existing methods
- **Micro-binary 10,000 psi** pump package
- **At least 5-10x throughput** improvements
- **High-productivity FX UHPLC** autosampler
- **Peltier Column oven** for retention time reproducibility and viscosity reduction
- **High-speed FX UV/Vis** (100 pt/sec) with high-efficiency 2.4  $\mu$ L flow cell



Isoflavones in nutraceutical products can be analyzed with UHPLC over six times faster, with higher sensitivity, using over 90% less mobile phase solvent compared with conventional HPLC.

#### Reach for greener productivity

Labs in every industry are concerned about the waste disposal, cost and shortage issues surrounding solvent consumption. PerkinElmer tackles the problem. Flexar UHPLC systems can deliver as much as 10-fold gain in productivity, while reducing mobile phase solvent consumption by more than 15-fold, depending on the application. Now greener operations are within your grasp.

Field-proven reliability and low cost of ownership make Flexar a smart choice.



## FLEXAR LC



### For ease and reliability, there's only one choice.

Let's start with the basics – ergonomics, safety, reliability, ease, performance. You get it all with the Flexar LC. The elegant user interface is streamlined to improve throughput and optimize operator safety. And Flexar simplifies your process so you can focus on your application. It's the HPLC system you'll count on day after day.

- **Integrated LC tube management** for streamlined chromatography
- **Hidden plug-and-play drainage** automatically interconnects with components added to system
- **Convenient solvent manager** with integrated degasser and software communication link
- **Built on rugged and reliable PerkinElmer LC technology** for maximum uptime and low cost of ownership



Features easy-open access to the autosampler.



Unique hidden inter-component drainage system protects the user and system from leak errors.

### Reach for experience

Flexar is the latest innovation in PerkinElmer's long track record of performance in liquid chromatography. With over 30 years of experience in LC, we understand the challenges you face. Our solutions have been proven in thousands of labs worldwide.

# CHROMERA, THE POWERFULLY EASY CDS.

Chromera combines powerful functionality with unmatched ease of use for a more streamlined data handling experience. It's the first CDS developed keeping specific UHPLC

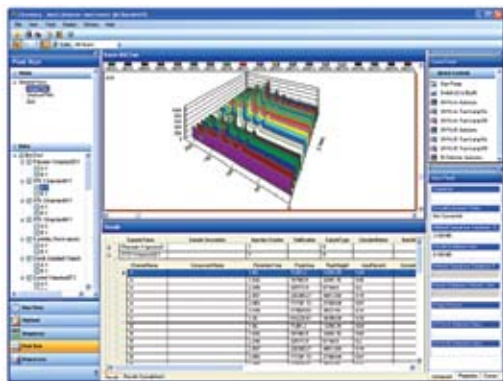
in mind. Any task you wish to perform is only one or two clicks away. And every page is optimized to allow for maximum integration of information.

## Powerful Functionality

- Device description technology automatically changes the GUI to reflect the configuration you've selected
- Method editing can be done in real-time with immediate feedback on status
- Run time can be extended during analysis to facilitate your method development process

## Unmatched Ease of Use

- Modular design and intuitive "one-click" navigation make operation simple and data easy to locate
- Interface provides "hands-on" control of instruments – for immediate interaction with your chromatographic system



Choose from single plot, stacked plot, grid views or overlays to better assess results. 3D view of data makes for dynamic presentations.



**CHROMERA CDS**  
Chromatography Data System

## Helpful Wizards

- Point-and-click identification automatically enters data when clicking on a point in your chromatograph
- Decision points automatically pause a sequence so you can check parameters and make any adjustments
- Reporting wizard provides a wide range of templates as well as the ability to customize your own reports

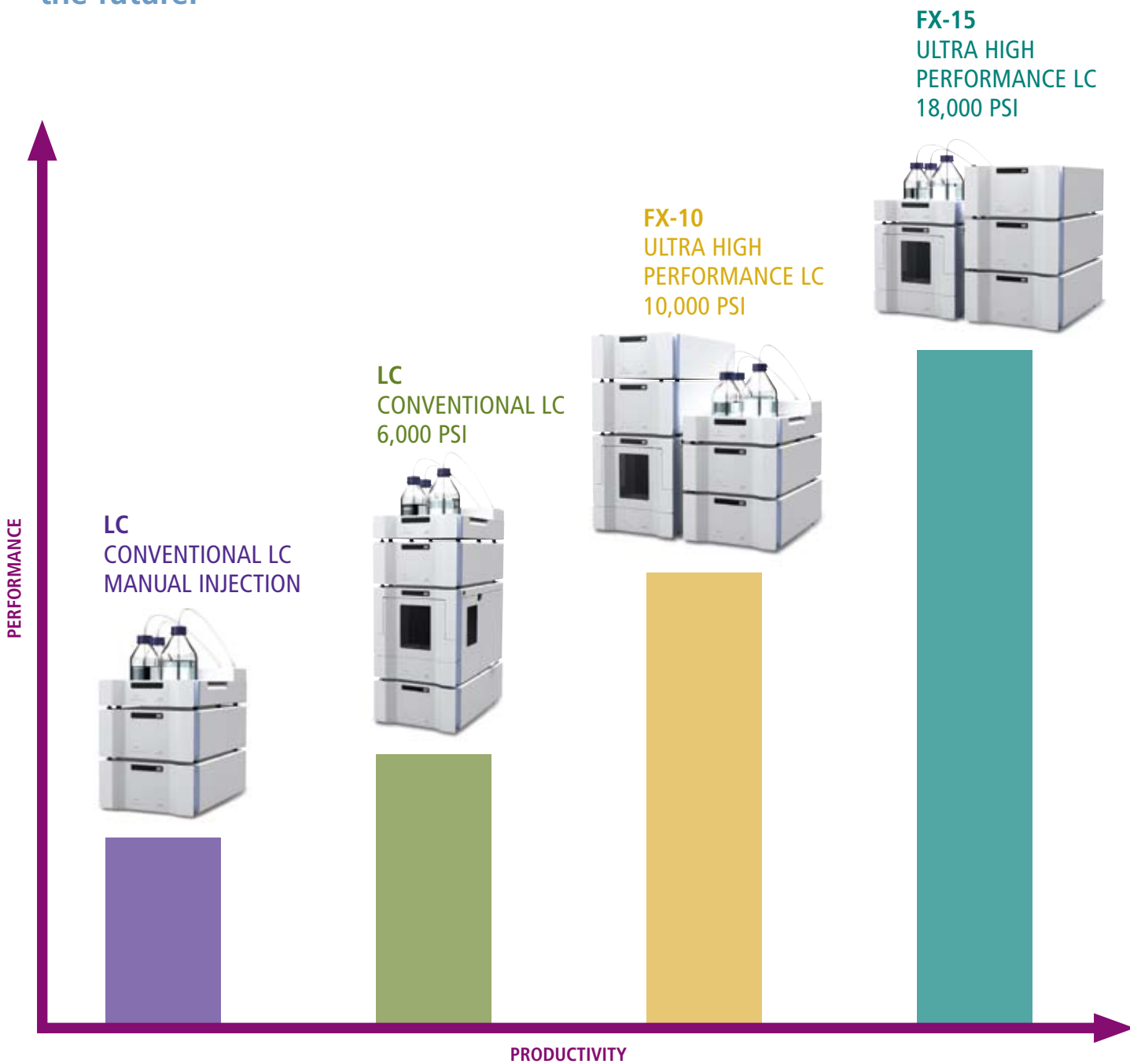
## TotalChrom – compliance and enterprise solutions

Even at the highest throughput levels, TotalChrom handles peak detection, integration and analysis with sophisticated algorithms, refined through years of experience in chromatographic data processing. Your method development is faster and easier with TotalChrom CDS.

- Scalable architecture
- Manages in stand-alone, thin-client or client/server environments
- 21 CFR Part 11 compliance features
- Serves as both instrument controller and data manager

# THE AMAZINGLY FLEXIBLE FLEXAR.

Expandable options to meet your needs today and into the future.







Mix and match these stackable, modular components to meet your application needs.

### SOFTWARE SOLUTIONS

- Chromera and TotalChrom

### PUMPS

- Flexar Isocratic LC Pump
- Flexar Binary LC Pump
- Flexar Quaternary LC Pump
- Flexar FX-10 UHPLC Pump
- Flexar FX-15 UHPLC Pump

### DETECTORS

- Flexar UV/Vis LC Detector
- Flexar FX-UV/Vis UHPLC Detector
- Flexar PDA LC Detector
- Flexar FX-PDA UHPLC Detector
- Flexar Refractive Index LC Detector
- Flexar Fluorescence LC Detector

### AUTOSAMPLERS

- Flexar LC Manual Injection Valve
- Flexar LC Autosampler
- Flexar FX UHPLC Autosampler

### COLUMN OVENS

- Flexar LC Column Oven
- Flexar Peltier Column Oven
- Flexar Peltier LC Column Oven with Switching Valve

### SOLVENT MANAGERS

- Flexar Solvent Manager
- Flexar Solvent Manager with 3-channel Vacuum Degassing
- Flexar Solvent Manager with 5-channel Vacuum Degassing

**Complete your ideal LC system with Flexar's full selection of consumables and kits. And be sure to ask about our flexible financing options.**

# WE GIVE YOU ALL THE COMPONENTS OF SUCCESS.

## PUMPS

### Pump up performance.

More samples done faster. Year after year. That's what you get when you combine high throughput power with the industry's most reliable, rugged family of pumps. We have the performance you want, whatever your analytical flow rate needs may be.

- **10x throughput improvement** with Flexar FX-10 and FX-15 UHPLC pumps
- **10-15x less solvent consumption** for minimal waste disposal, reduced operating costs and greener productivity



**BINARY LC PUMP**

- **Proven reliability** minimizes cost of ownership
- **Isocratic to binary to quaternary upgrades** right in your lab

## DETECTORS



**UV/VIS AND FLUORESCENCE LC DETECTORS**

### See deeper into your sample.

From rugged reliability to outstanding spectral integrity, Flexar Detectors offer fast, sensitive performance for a wide range of applications. Get every detail about your samples and gain deeper insights in your results.

#### Flexar UV/Vis Detectors

- **Wide range of flow cells** from conventional 10 mm down to high-efficiency micro flow cell for optimum UHPLC peak resolution

- **Captures even the fastest UHPLC peaks** with 100 pts/sec detection on FX model
- **Dual-beam optical design** with choice of deuterium or tungsten source lamps

#### Flexar PDA Detectors

- **Excellent performance**, HPLC or UHPLC
- **Improved noise specifications** with wide linear range and exceptional stability
- **High-efficiency 2.4  $\mu$ L flow cell** with optimized detector electronics on FX models

#### Fluorescence Detectors

- **Exceptional sensitivity** for the most demanding applications

#### Flexar Refractive Index

- **Highly stable, sensitive detection** for compounds without high UV absorbance
- **Reliable, unattended analysis** with remote autozero and autopurge of reference cell
- **Increased detector stability** with active temperature control of the flow cell

## AUTOSAMPLERS



FX AUTOSAMPLER

### Inject with greater precision.

Best-in-class cycle time. Wide injection volume range. Excellent injection reproducibility. Precisely what you need to increase your sample throughput and efficiency.

- **Injects sample volumes as little as 1  $\mu$ L** at pressures up to 18,000 psi with the FX UHPLC Autosampler
- **Loads sample in only 8 seconds** (in partial fill mode)
- **Three injection modes:** full loop, partial fill and  $\mu$ L-pickup with no sample waste
- **Peltier cooling/heating mode option** for operation at 4°C to ambient 40°C. Will reach with 4°C  $\pm$  2°C achievable even at ambient temperatures up to 25°C

## COLUMN OVENS

### Get a higher degree of control.

Get precise temperature control for better column performance and more repeatable retention times. With its built-in leak alarm and choice of versions, the Flexar LC Column Oven is the safe, accurate, flexible choice.

- **Three versions:** conventional oven, Peltier (heat and cool) and Peltier with column selection/switching
- **Temperature range of 30°C to 90°C** (5°C to 90°C for Peltier), controlled to within 0.2°C throughout the entire temperature range
- **Large, easily accessible column compartment** holds even 30 cm column format



LC COLUMN OVEN

## SOLVENT MANAGERS



SOLVENT MANAGER

### Keep your work flowing.

There's nothing stopping you now. Convenience and protection are built-in with the Flexar Solvent Manager.

- **Plug-and-play drainage system** automatically interconnects, even as you add components
- **Removable tray** contains breach of complete bottle
- **Three versions:** without degassing, 3-channel degassing and 5-channel degassing

## Liquid Chromatography Consumables

### PerkinElmer supplies – tested and approved

To complement the new family of Flexar instrumentation, PerkinElmer offers a full selection of consumable products.

- HPLC and UHPLC Columns
- Syringes, Syringe Kits and Filters
- Autosampler Trays, Vials, Septa and Caps
- Static Mixers (High Pressure, Conventional Pressure)
- Finger-tight Fittings, Tubing and Valves
- Flow Cells from Semi-prep to UHPLC
- Degassers, Bottle Kits and Tools
- Thousands of Products for All Your Application Needs

## Global support; a local response.

Understanding our customers' needs, we realize the importance of rapid response and expert technical advice. We know it's vital that you have the most reliable service and support for your instrumentation, wherever your laboratory is located. That's why we have over 1300 engineers in over 120 countries who are dedicated to providing excellence in customer service.

Our goal is to ensure your instrumentation is running at optimum levels at all times. With the availability of consumables and accessories coupled with technical support specialists, and a complete offering of IQ/OQ products, we are ready to give you the support you need to ensure continued success.

For more information about Flexar, visit [www.perkinelmer.com/flexar](http://www.perkinelmer.com/flexar)



### Know more. Do more.

Fewer impurities in the air we breathe, the water we drink, the food we eat and the things we touch – made possible by EcoAnalytix™ from PerkinElmer. EcoAnalytix gives you complete solutions for your applications challenges. It offers more ways to ensure a cleaner, safer ecosystem, from tailored products to SOPs, than any other company. With EcoAnalytix, you know more so you can do more.

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