ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

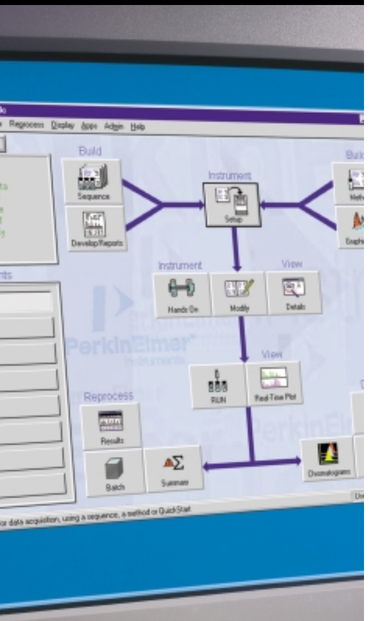
Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Find the *Perkin Elmer 200* at our website: ***Click HERE***

TOTALCHROM LC PLUS SYSTEM

The Data Handling Solution for R&D or QA/QC



We're your worldwide partner in **BUSINESS SUCCESS**.

Around the corner or across the world, you can depend on PerkinElmer as your partner in providing total solutions for your analytical needs. That's because there's MORE to us than our instruments and advanced technology. Our comprehensive support system is designed to help your lab operate with greater accuracy, efficiency and productivity.

Financing Programs

PerkinElmer has a suite of leasing programs to complement the needs of today's companies. In most cases, you can finance 100% of the instrument, software and maintenance—or you may customize your own lease.

Unparalleled Customer Support

Most importantly, we've assembled a worldwide support team that's unparalleled in the industry—highly trained, knowledgeable people standing by to make sure you always get the assistance you need, when you need it, whether on-site, online or over the phone.

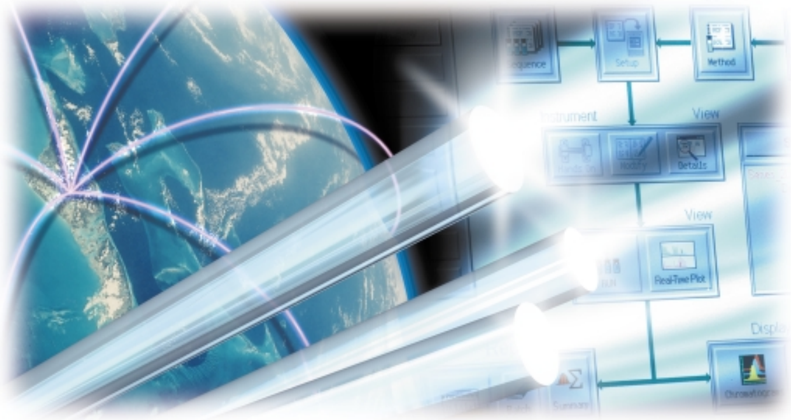
PerkinElmer
Life and Analytical Sciences
710 Bridgeport Avenue
Shelton, CT 06484-4794 USA
Phone: (800) 762-4000 or
(+1) 203-925-4600
www.perkinelmer.com

PerkinElmer™ precisely.

© 2003 PerkinElmer, Inc. PerkinElmer is a trademark of PerkinElmer, Inc. TotalChrom, TurboChrom and TurboScan are trademarks of PerkinElmer Instruments LLC. Windows is a registered trademark and Hyperterminal is a trademark of Microsoft Corporation. NuGenisis is a registered trademark and UNIFY, VISION, and ARCHIVE are registered trademarks of Mantra Software Corporation. PerkinElmer reserves the right to change this brochure at any time and disclaims liability for editorial, pictorial, or typographical errors.

D-5922D KG010303 Printed in USA

TotalChrom
LC Plus Systems



Choosing the **right** data handling and LC systems can be difficult.

PerkinElmer™ precisely.

But, it doesn't have to be…



Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Whether you're starting with a single HPLC system or plan to operate numerous LC and GC systems, the fully scalable power of the TotalChrom platform is the ideal solution.

TotalChrom...the most powerful Windows-based chromatography software on the market.

In today's laboratory you need a computing strategy to adequately handle the growing volume of chromatographic data quickly and efficiently. A strategy that can easily be implemented and that can grow and adapt to your changing needs. A strategy that satisfies regulatory requirements such as 21 CFR part 11 and the need to archive and recall data - all while maintaining ease of use. TotalChrom is the answer.



R&D system with Series 200 Diode Array Detector and Column Oven

TotalChrom is the next stage in the evolution of chromatography software – building on Turbochrom, the industry-standard, PC-based chromatography data handling software system that won the 1999 "Readers Choice" Award from *Scientific Computing & Automation* magazine for the seventh consecutive year.

FAST FACTS

TotalChrom LC Plus System

→ Multi-vendor, multi-instrument control and data processing from a single PC Workstation or a complete Client/Server System

→ Fast and flexible sampling from several vial formats or directly from various style microtiter plates with or without temperature control

→ Choice of Microbore, Isocratic, Binary or Quaternary pumps

→ Choice of variable wavelength or diode array UV/Vis detection

→ Full testing, certification, validation and support services provided by factory-trained Customer Support Engineers

The TotalChrom LC Plus is the only HPLC system to deliver all this and more...

- Industry-standard system design—developed specifically for Microsoft's 32-bit operating systems: Windows NT,® Windows® 2000 and Windows 98.
- Single point control of data processing and instrument method parameters—for PerkinElmer LC and GC instruments, as well as those from other major instrument manufacturers.
- Power for today's and tomorrow's needs—powerful data handling and networking capabilities can be fully scaled to your current and future chromatography needs.
- Complete validation of results—developed under an ISO 9001 registered engineering and quality system, complete IQ/OQ documentation and services, and comprehensive audit trail recording with 21CFR Part 11 compliant electronic signatures to meet regulatory requirements.

FAST FACTS

TotalChrom Workstation & Client/Server

→ Choice of Windows NT, Windows 2000 or Windows 98 operating environments

→ Customizable security controls and complete audit trail recording including electronic signature

→ Multilingual support

→ Direct control of PerkinElmer LCs and GCs, as well as those of other leading manufacturers

→ Client/Server architecture facilitates seamless method and data transfer

→ Electronic signature feature to ensure 21CFR Part 11 compliance

- Uninterrupted data acquisition—intelligent interfaces connect each chromatograph to the data system—each interface has buffered RAM memory to maintain data collection even if the network or PC is inoperative.

"The TotalChrom LC Plus system increases the productivity of any QA/QC or R&D laboratory..."

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

No other HPLC system gives you **MORE** power and flexibility

The customizable TotalChrom LC Plus system is the solution to your most demanding application requirements. From getting a new product to market to performing routine QA/QC analysis, the TotalChrom LC Plus helps you streamline the process by efficiently performing unattended analysis.

Whatever the level of analysis, all the HPLC components are controlled from the same TotalChrom platform, eliminating the need for analysts to learn multiple systems and software. That's your assurance of guaranteed method and data transferability from your methods development laboratory down the pipeline to more routine analysis.

Although the TotalChrom software platform remains the same, you can control and collect data from the detector that meets your unique analytical needs:

- Series 200 Diode Array Detector—designed to meet the rigorous needs of methods development and R&D.
- Series 200 UV/VIS Detector adds new features and benefits to the recognized performance of the industry-standard 785A UV/Vis Detector—maintaining its outstanding sensitivity and stability, ideal for quantitative analyses such as QA/QC work.

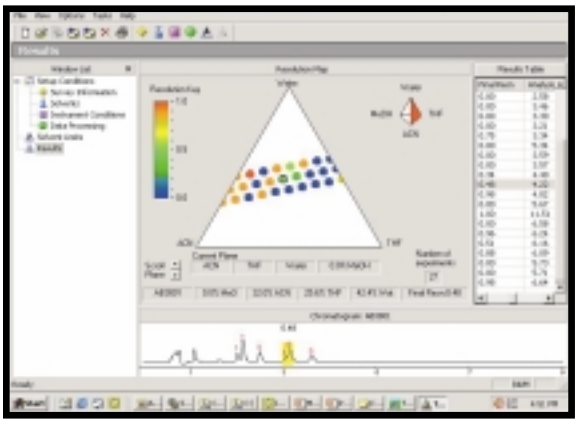
TotalChrom is ready to meet new challenges

A truly successful chromatography system needs to unify seemingly diverse concepts - be feature rich yet easy-to-use - do the most work possible with the minimum of time and effort - meet strict regulatory and security requirements yet remain flexible - control one HPLC system or dozens. TotalChrom is able to meets these challenges and more.

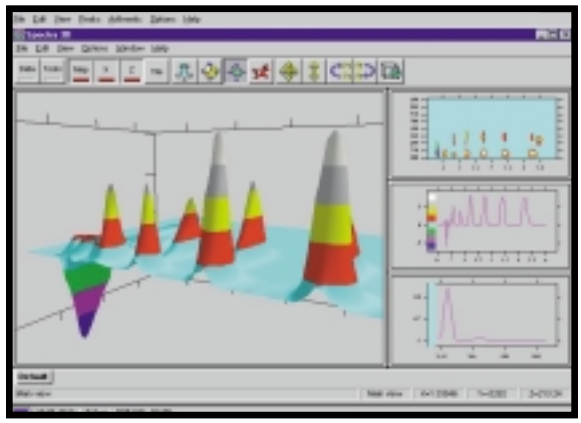
TotalChrom uses Microsoft Windows standard interfaces and graphics - allowing you to quickly and easily build methods. There's even a Graphic Method Editor (GME) that builds the best method based on your particular chromatographic results. This same level of automation and sophistication is available for building lengthy sequences of multiple runs quickly and easily via TotalChrom's template driven Sequence Editor -featuring that spreadsheet look and feel you're familiar with.

TC Publisher - the ultimate in reporting

Once your data is collected, our new TC Publisher raises the bar on data reporting by providing a custom report generator using industry-standard tools. Unique features let you graphically format the exact report you want, control the layout and appearance of your chromatograms, and even use "if/then" conditional logic - all without extensive training. TC Publisher even lets you do calculations between samples and do automatic statistics for replicate injections - with full control over the format of the output. In fact, TC Publisher will often replace those special custom applications written for your current system - thus minimizing costs, efforts and validation concerns.



Turbo Method Development Software saves times in developing rugged methods.



TurboScan 200 Software permits thorough analysis and complete processing of spectral data.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Quality and Compliance by design.

PerkinElmer has been at the forefront of software quality and compliance. TotalChrom is developed and structurally validated following a Certified Quality System conforming to GLP, GMP and ISO 9001/TickIT requirements. Additionally, our Software Development Life Cycle conforms to the ISO-9000-3, PDA and IEEE guidelines.

By continually advancing to meet changing requirements, new TotalChrom features include options for 21 CFR part 11 compliance. Special system safeguards prevent overwriting data and unintended user access – while audit trails and electronic signatures in data acquisition, instrument control, and data storage ensure data integrity. Documentation of all methods, sequences, and reports - including instrument run logs - provide a complete and unambiguous link from the initial experiment to the final results.

FAST FACTS

TurboScan 200 Spectral Processing Software

→ Supports spectral data from the Series 200 Diode Array and LC-235C detectors

→ Determines peak purity and wavelength maximum of peak spectra as well as spectral library matches to confirm peak identity and assess homogeneity

→ View and manipulate chromatograms, spectra, contour maps and 3D plots in extreme detail

→ Extract and reprocess chromatograms at any wavelength directly from the spectral data

Access, display, and manipulate spectral data with speed and flexibility... TurboScan 200.

Working with the Series 200 Diode Array Detector, TurboScan 200 gives you the power to:

- Confirm peak purity and compound identification.
- Extract chromatograms and spectra from 3D plots or contour maps.
- Seamlessly route new data back into Turbochrom for integration, quantitation, or to aid in graphic method creation.
- Numerically or graphically manipulate spectra; add, divide, subtract or perform derivative functions for complete evaluation of every component—known or unknown.
- Utilize predefined spectral libraries or create your own to confirm or identify components and automatically update your TotalChrom reporting method.

Methods development and validation made easy... Turbo Methods Development

Use Turbo Methods Development (TMD) with either the Series 200UV/Vis or Series 200 Diode Array Detectors. By automatically building and running a series of TotalChrom methods, you'll develop optimal and robust separations—without previous experience or extensive research. Just enter your solvent and sample parameters and go. TMD will:

- Automatically perform actual chromatographic experiments by varying the mobile phase composition of up to four solvents.
- Display the results from dozens of chromatographic runs in a unique color-resolution map format for easy interpretation.

With TMD, experiments you design are run and analyzed automatically by the TotalChrom LC Plus system—allowing you to do more. Use our TMD software with any mode of liquid chromatography without restrictions on analysis time or mode of separation.

FAST FACTS

Turbo Method Development Software

→ Automates HPLC method development and validation processes such as solvent optimization, and robustness testing on samples of unknown composition

→ Processes and displays results in a unique, easy-to-interpret graphic format

→ Predicts separations as solvent composition changes between solvent conditions from two actual HPLC separations

"TotalChrom LC Plus has the **POWER** to deliver what it promises—unrivaled **PERFORMANCE** sample after sample..."

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Count on outstanding **PERFORMANCE** with PerkinElmer HPLC instrumentation

For over 25 years, PerkinElmer has designed, manufactured and supported a full line of HPLC instruments and accessories. Build your system around the following instruments…

The Series 200 UV/Vis Detector... the Chromatographer's NEW choice for QA/QC.

The worthy successor to the 785A, our new Series 200 UV/Vis detector is fully controllable through the TotalChrom LC Plus system. This dual-beam detector provides reliable and repeatable results even under the most difficult chromatographic conditions.

- A choice of deuterium or tungsten lamps make it ideal for all UV/Vis applications.
- Selection of flowcells for all your application needs.
- Outstanding linearity performance means accurate quantitation even at extremely low or high analyte concentrations.

The Series 200 also includes built-in user diagnostics and wavelength confirmation tests.

FAST FACTS

Series 200 UV/Vis Detector

→ Noise specification of less than ± 0.75 X 10^{-5} AU

→ Superior sensitivity for trace analysis detecting even picogram quantities

→ 190–700 nm wavelength support

→ Choice of microbore, narrow bore or conventional cells



Series 200 UV/Vis Detector



Series 200 Diode Array Detector

FAST FACTS

Series 200 Diode Array Detector (DAD)

→ 190–700 nm UV/Vis capability with 1 nm resolution

→ Noise specification of ± 1.5 X 10^{-5} AU for high sensitivity

→ Spectral processing including 3-D plots, contour maps, overlays, subtraction and derivatives

Series 200 Diode Array Detector... setting the new standard for Methods Development and R&D.

Operating with the powerful TurboScan200 spectral processing software, the Series 200 Diode Array Detector is fully integrated within TotalChrom. Now moving between instrument control, chromatographic data processing and spectral evaluation is easier than ever before.

- Complete characterization of all samples is ensured by the wide UV/Vis wavelength range.
- Guarantees the best overall analytical performance across the entire UV/Vis range through the simultaneous use of deuterium and tungsten sources.
- Accurately identify and assess the purity of compounds with 1 nm digital resolution.
- Collection of all spectral information during the run eliminates the need to re-run samples to obtain additional data.

You'll also enjoy advanced graphic manipulation, spectral library searches, and post-run generation of chromatograms at any wavelength.

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

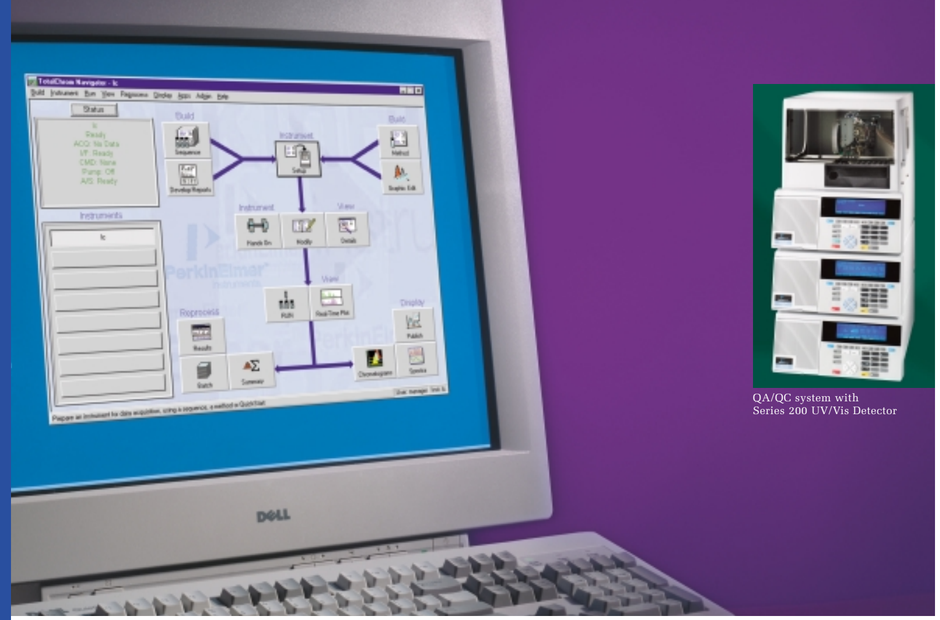
Some instrument vendors provide "solutions" that make collecting data from other vendor's instruments all but impossible — locking you into theirs.

Others use operating systems and architecture that can't accommodate multiple instruments, or limit the number of instruments which can be operated on one system.

The result? Their limited growth strategy can't keep pace with your laboratory's changing needs and the price to performance ratio of your investment is severely limited.

The solution!

The TotalChrom LC Plus system. The system designed for outstanding performance in your multi-instrument/multi-vendor environment — today, tomorrow, and in the future.



QA/QC system with
Series 200 UV/Vis Detector

TotalChrom LC Plus. Providing the **POWER** you need for the **PRODUCTIVITY** you want…

Add a new dimension to HPLC control and data processing. With the TotalChrom LC Plus™ system, analyzing components in greater detail at a higher throughput level is faster and easier than ever before. Whether your needs are for sophisticated R&D or more quantitative QA/QC applications, the TotalChrom LC Plus system delivers results. For detailed spectral analyses, TotalChrom LC Plus with our Series 200 Diode Array Detector has the feature set you need to confirm component identity and purity. For quantitative QA/QC applications, configure your system around our Series 200 UV/Vis Detector, the next generation of the benchmark 785A UV/Vis for outstanding sensitivity, linearity and stability.

PerkinElmer has made all this and *more* possible by successfully integrating the following products into a complete, fully automated and scalable system for your entire laboratory:

- TotalChrom™ Software—the new generation of the most comprehensive and proven chromatography data system available.
- Turbo Methods Development (TMD) Software—for efficient, automated, unattended methods development and method robustness testing that saves you effort and valuable time.
- TurboScan™ 200 Software—advanced spectral processing and graphics manipulation package.
- PerkinElmer's proven rugged and reliable HPLC components.
- Plus! PerkinElmer's renowned, global sales and support network.

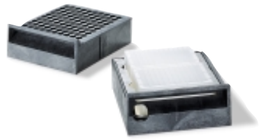
Need speed? Can't sacrifice reliability? Worried about flexible sampling? Our Series 200 Autosampler is the only one that does it all!

The Series 200 Autosampler can be fully controlled from the TotalChrom LC Plus system, giving you complete control over a wide variety of injection features; injection volume, needle height, flush cycles, and flush volume.

- 50% savings in sample loading/injection time — the Series 200 Autosampler rapidly brings the needle to the sample, eliminating the time, complexity and unreliability of moving sample vials, while providing support for numerous sample container formats.
- Fast, flexible and ultra-reliable sampling — up to three injections per minute due to the unique, all gear-driven drive mechanism. Our added advantage…no belts or pulleys to wear out.
- Easily interchangeable, cost-effective sample trays — choose from over 10 different tray/sampling formats, including Peltier temperature control. High-capacity sample trays can accommodate up to 225 vials or two 96 well plates.
- Carryover and contamination are minimized by a process that washes both the inside and outside of the needle.
- Rapid vial-to-vial transfer, including built-in derivatization and dilution routines.

TotalChrom LC Plus system
with Series 200 Pump,
Autosampler and DAD





FAST FACTS

Series 200 Autosampler

→ Flexible sample processing from vials, microvials or microtiter plates with or without Peltier temperature control

→ Extremely fast and reliable gear-driven design with innovative sample loading and injection mechanism

→ Superior dilution, derivatization and vial-to-vial mixing features; run stand-alone or controlled from Turbochrom

→ Uses standard Rheodyne 7725, 8125 or 9725 injection valves for easy maintenance and upgradability

Precise blending through advanced engineering…one of the benefits of the Series 200 Pump.

The proprietary and proven, rugged and reliable design of the Series 200 Pump delivers highly precise flow rates and exceptional, high-performance gradient capability. The Series 200 is the only pump in the world that automatically compensates for solvent compressibility. Gradient programs are simple to set up graphically through the TotalChrom LC Plus Pump method page.

- True mixing volume correction using the chemist's approach to obtain reliable mobile phase mixtures—run after run.
- Rugged double ball and seal check valve design.
- Engineered for long piston seal life and less downtime.

The Series 200 Pump is also available in a biocompatible version featuring a built-in piston wash for prolonged seal life with buffered mobile phases.

FAST FACTS

Series 200 Pumps

→ Choice of microbore, isocratic, binary or quaternary solvent delivery

→ Patented design automatically compensates for solvent compressibility for any solvent mixture during each pump stroke

→ Unique, rugged design minimizes piston seal wear and check valve problems producing high reliability and low maintenance

→ Choice of in-line vacuum degassing or unique helium degassing for solvents

The TotalChrom LC Plus System

The Solution for R&D or QA/QC

→ **Designed to integrate a multi-instrument/multi-vendor environment**

→ **Customizable and expandable to meet your lab's needs now and in the future**

→ **Built on the power of the 32-bit, multitasking TotalChrom Chromatography Workstation**

→ **Single point of control for data handling and instrument parameters**

→ **Simplifies compliance with GLP and other regulatory standards via advanced security and audit trail features**

→ **Unifies your laboratory with complete multisystem communication, networking, and linking to LIMS**

→ **Increases the quality of your results and your confidence in laboratory operations**

Choose the system with **MORE** ways to meet today's needs and future demands…Choose the TotalChrom LC Plus system

Artisan Technology Group - Quality Instrumentation ... Guaranteed | (888) 88-SOURCE | www.artisantg.com

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP