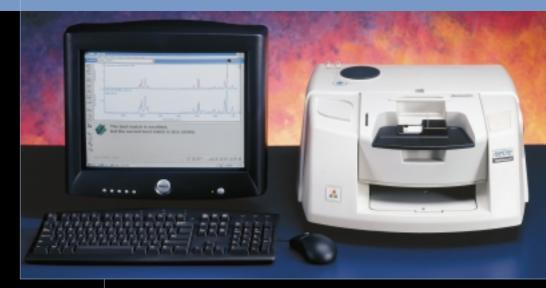
Nicolet<sup>®</sup> Avatar<sup>®</sup>



# Total Solution FT-IR Spectrometers



Forensic



QA/QC



Chemical



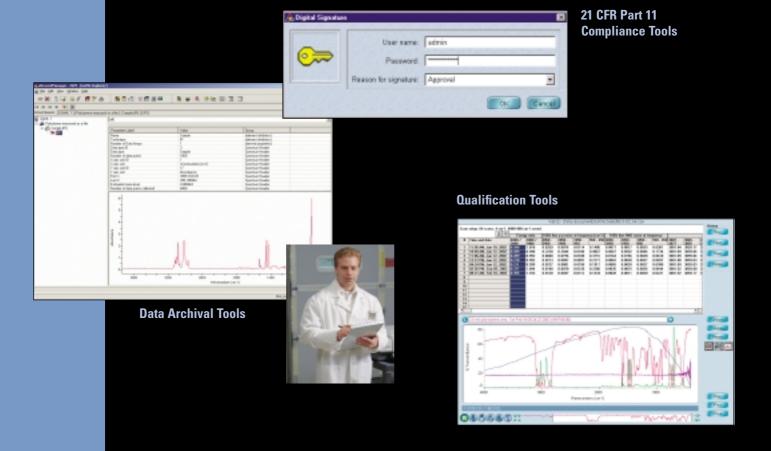
Pharmaceutical



# **Nicolet Avatar is a Total Solution Package**

The Nicolet Avatar Fourier transform infrared (FT-IR) spectrometer is the standard for a total solutions package to address your infrared analysis needs. The Nicolet Avatar transforms the way you interact with the instrument. By providing a system that works with you throughout your process — from receiving the sample to collecting the data and reporting the results — the Nicolet Avatar does more than provide data, it solves your problems.

Nicolet Avatar is compatible with a variety of tools to keep your process compliant with GLP, cGMP, 21 CFR Part 11 and many other regulatory requirements. Throughout the instrument lifetime, Thermo Electron Corporation provides total quality from manufacturing to installation to customer support. The Nicolet Avatar gives you confidence in your results and makes your job easier every step of the way.











Nicolet Avatar brings the spectrometer, software and accessory together in a package that gives you solutions, not just data.

Nicolet Avatar is the system of choice for an FT-IR spectrometer that works with you. From the day it arrives, Nicolet Avatar simplifies everything about infrared analysis. Its integrated package of system, software, accessories and expertise provides the best solution for your infrared testing requirements.

#### **Easy Sampling**

- Smart Accessory<sup>™</sup> modules are recognized immediately
- Customized experiments provided for each technique
- Permanently aligned to ensure optimized performance and eliminate drift
- Full-sized sample compartment for compatibility with all available infrared accessories



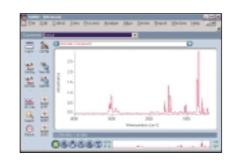
#### **Easy Purge**

- Sealed and desiccated for transmission analysis
- Small purge volume to stabilize quickly
- Smart Accessories purge automatically when inserted



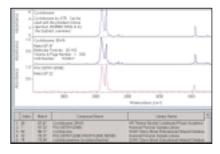
#### **Easy Interface**

- Intuitive OMNIC® software provides complete data collection, analysis and reporting tools
- Customizable tool-bar keeps common functions available with a single mouse click
- Automated procedures minimize training and speed analysis
- Autotrail tracks data changes automatically



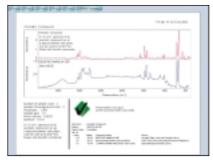
#### **Easy Identification**

- Unparalleled collection of FT-IR databases for identification of unknown compounds
- User library creation is a standard feature
- Libraries are useful for data storage and routine testing



#### **Easy Presentation**

- Report Generator provides standard report types and the ability to customize reports
- Display spectra, analysis results, images and more
- Print reports or store them permanently in non-editable, electronic laboratory notebooks





The Nicolet Avatar system provides expertise and guidance every step of the way. Just turn on the spectrometer and the system goes to work, checking the system and data status. You can complete your analyses with confidence and ease, enhancing productivity. Nicolet Avatar's intelligence takes your spectral data and translates it into the answers you need.

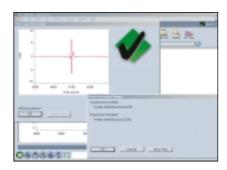
#### **Smart Accessories**

- Widest range of accessories and techniques available in the industry
- Automatic accessory recognition, performance checks, and experiment selection
- Data quality checks can identify potential problems like scratched or dirty crystals to ensure data quality



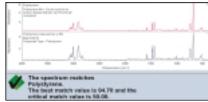
#### **Smart Checks**

- Enhanced Synchronization Protocol (E.S.P.) monitors data as it is collected to ensure optimum performance
- System provides recommendations for performance improvement or troubleshooting procedures
- Continuous monitoring provides confidence in consistent results every day



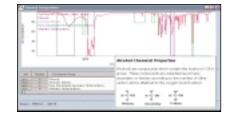
#### **Smart Searching**

- Proprietary Search Expert and QC Compare features give expert advice
- Search Expert feature provides matches and interpretation of results
- QC Compare allows comparison of collected data with known standards for pass/fail confirmation



#### **Smart Interpretation**

- Standard software includes detailed information on over 100 common functional groups
- HTML format interpretation information can be included in reports and presentations
- Excellent tool for training new users or reference for non-spectroscopists



#### **Smart Advice**

- Extensive multimedia tutorials on all subjects from FT-IR theory to sampling accessories
- Provides built-in training course for busy laboratories
- Allows users to get answers to all FT-IR questions efficiently from Thermo, the leader in infrared spectroscopy



#### **Smart System Qualification**

- Val-Q<sup>™</sup> software provides verification procedure to ensure GLP/cGMP compliance using ASTM tests for FT-IR
- Optional data security software available for users concerned with electronic record integrity and digital signatures for 21 CFR Part 11 compliance
- Data archival also available with eRecordManager™ for organization and secure long-term storage of all your laboratory results in one database



# Powerful

Under the cover of the Nicolet Avatar, you will see an advanced optical instrument. Pinned-in-place optics provide a system with remarkable stability and reproducibility. The optical framework is a precision-cast single piece that guarantees incredible precision in component installation without alignment. This allows user-replaceability of many components, minimizing long-term maintenance costs, and ensures that key optical components do not drift in alignment over time.

#### **Powerful Optics**

- Short pathlength from source to detector results in minimal atmospheric influences in spectral data
- Pinned-in-place design includes the source, laser, mirrors, detector and other critical components for long-term stability
- High performance built into this small instrument does not compromise valuable laboratory workspace



#### **Powerful Performance**

- Exceptionally stable interferometer in rugged design
- Small instrument provides excellent resolution capability (0.5 cm<sup>-1</sup> available)
- Compact size also minimizes environmental changes or vibration disturbances, producing higher quality data

#### **Powerful Guarantee**

The Nicolet Avatar system will guide you through your FT-IR requirements from the first day it arrives in your laboratory. The integrated tutorials, accessory checks, and reporting tools make sure that your procedures are streamlined and consistent, giving you not just data but solutions. In addition, Thermo's highly trained and responsive service organization is ready to help you when needed. Nicolet Avatar's performance is backed by this extensive network of support, providing the best guarantee of success available.



# Pinned-in-place detector Integrated system validation wheel

Interchangeable

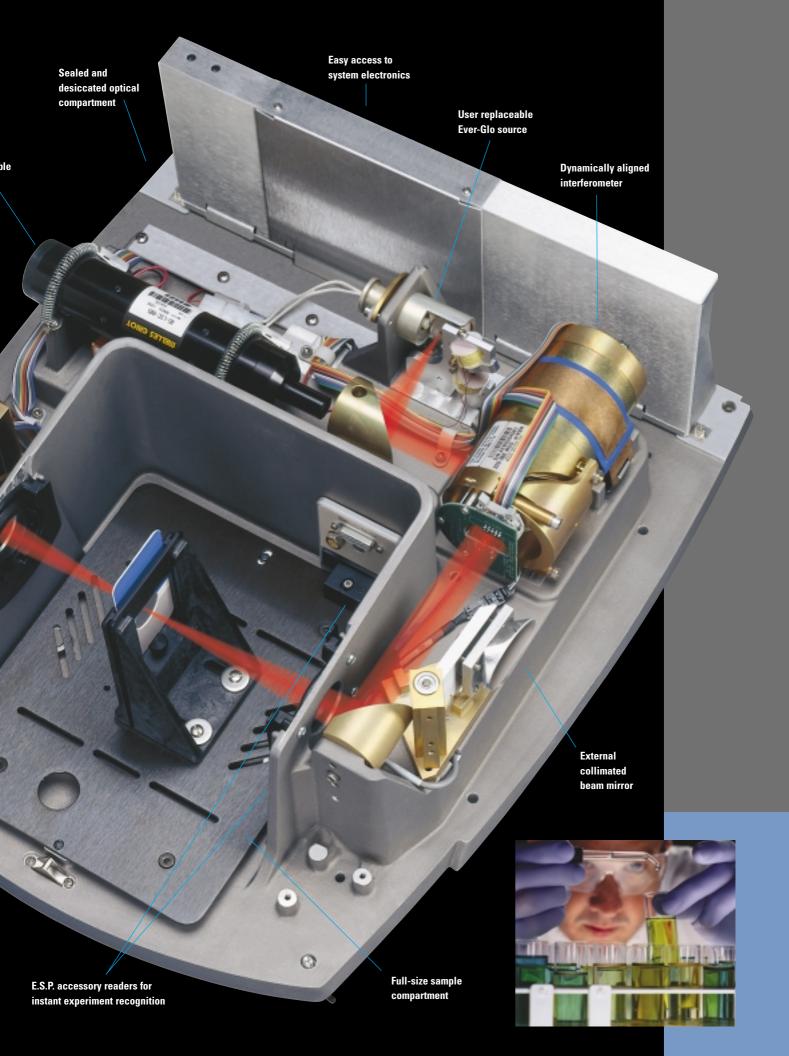
Snap-In™ baseplate

User-replacea

**HeNe laser** 

#### **Powerful Alignment**

- Dynamic alignment provides continual data optimization while scanning
- Excellent scan-to-scan reproducibility
- Consistent and high performance data available day after day



### Thermo's Family of FT-IR Spectrometers



#### **Nicolet Avatar FT-IR**

- QA/QC Analysis
- Exceptional Reliability
- Dedicated Spectral Range
- Easy-to-use
- Dedicated Solutions



#### **Nicolet Nexus FT-IR**

- Research FT-IR
- Highest Performance
- Multispectral Range
- Unlimited Applications
- Unlimited Upgradeability

#### **Shared Technology**

- Thermo Electron Worldwide Sales & Service Support
- Award Winning OMNIC Software
- OMNIC Macros\Basic<sup>™</sup> and Macros\Pro<sup>™</sup> Procedures Automation Software
- TQ Analyst™ Qualitative or Quantitative Software
- Val-Q™ System Qualification and Regulatory Compliance Software Packages
- Dynamic Alignment Highly Reproducible and Stable Systems
- Interchangeable Smart Accessories
- Full-sized, Common Sample Compartment
- Nicolet High Resolution Spectral Databases

# CarePlan<sup>™</sup>

#### **Spectroscopy Solutions backed by Comprehensive Service and Support**

State-of-the-art instruments are only the beginning with Thermo Electron. Comprehensive service and support programs are offered on our products worldwide by a network of factory trained and highly qualified scientists and engineers. Our experts will keep your instrument performing to specification.

Whether your organization is using a single Thermo spectrometer, or a number of instruments from several of our product lines, CarePlan is a single service and support plan to meet 100% of your needs. This unique package delivers an unmatched breadth of service, support and training options to match your facility's requirements (Currently available in US and select European countries including the UK, France, and Germany.)

Contact us today for more information on how our specialized sales and service engineers can help keep your Nicolet Avatar at top performance.

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