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Optimized analysis for oils, liquids, syrups and pastes

Thermo Scientific
Nicolet Summit OA FTIR Spectrometer

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Figure 1: Thermo Scientific Nicolet Summit OA FTIR spectrometer. A dedicated analyzer for rapid characterization of viscous and liquid samples.

The Thermo Scientific™ Nicolet™ Summit OA FTIR Spectrometer is specifically designed to rapidly measure viscous and liquid samples with minimal chance of spills damaging the analyzer. The Nicolet Summit OA provides the ideal performance and fit for quality control testing and material identification. An integrated zinc selenide (ZnSe) horizontal attenuated total reflectance (HATR) accessory delivers constant and reproducible pathlength, ideal for both qualitative and quantitative analysis. This spectrometer delivers maximum confidence and reliability with the Thermo Scientific™ LightDrive™ Optical Engine, including a 10-year warranty on the interferometer, laser and source. Streamline your analysis with the intuitive OMNIC Paradigm Software. The small footprint and rugged design fits neatly into any laboratory, making the Nicolet Summit OA ideal for QA/QC labs.

State of the art technology

- Built-in 40 degree ZnSe trough HATR accessory
- HATR multi-reflections and lower angle of incidence enhances sensitivity
- Seamless integration with Thermo Scientific™ TQ Analyst™ Multivariate Statistical Analysis Package
- User-replaceable ZnSe HATR crystal trough plate
- Smooth, leakproof cover design to minimize impact of spills
- Simplified user interface for running packaged workflows based on established categories
- LightDrive Optical Engine ensures years of reliable, high-performing data acquisition and 10-year warranty
- Multi-colored LightBar LED gives you instrument status at a glance
- Built-in Windows 10 computer gets you up and running with just a monitor, keyboard and mouse
- Use intuitive Thermo Scientific™ OMNIC™ Paradigm Software to create customizable workflows to simplify analysis
- Bundle workflows into packages with categories for easy sharing

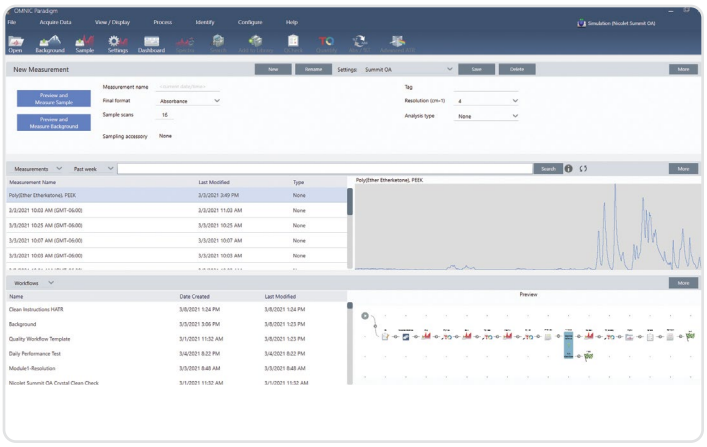

Figure 2: OMNIC Paradigm in Desktop mode — data center for creating workflows, manipulate spectra and optimize instrument settings.

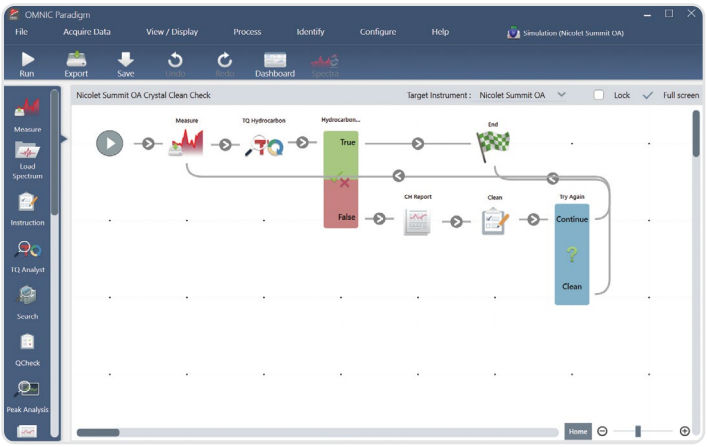

Figure 3: OMNIC Paradigm visual, intuitive workflow builder. Quickly create workflows to streamline data collection and analysis.

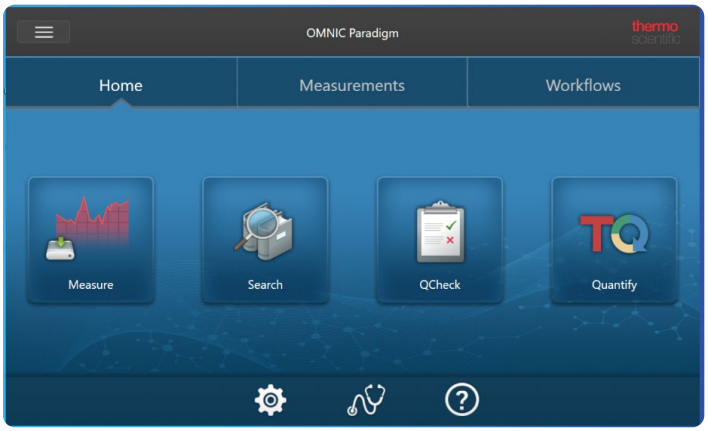

Figure 4: OMNIC Paradigm in Touchscreen mode — simplified click-and-go user interface.

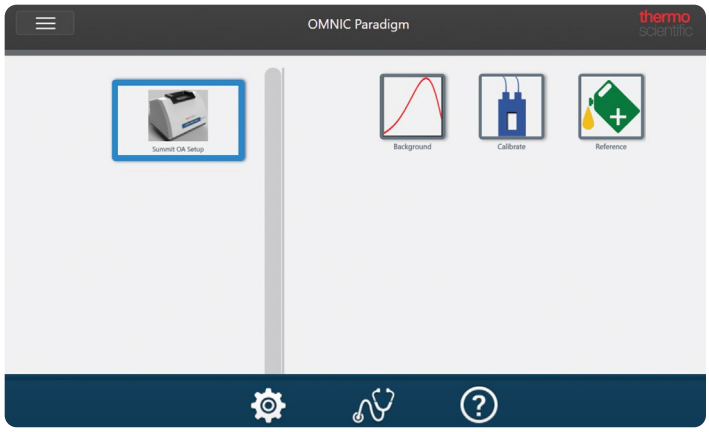

Figure 5: OMNIC Paradigm Operator mode limits user access to specified application workflows organized into packages.

Multiple operation modes

OMNIC Paradigm offers users 3 modes of operation to fit the user needs.

1. Simple click and go in touchscreen mode:
   - Apply › measure › clean
2. Spectral analysis and optimization in desktop mode
   - Create workflows
   - Manipulate and visually compare spectra
   - Optimize and remember specific instrument settings
3. Application specific workflows in operator mode
   - Create push-button, password-protected operator package
   - Includes all workflows, calibrations and diagnostics for your specific application

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Advantage of integrated HATR

- Multiple reflections on sample for maximum sensitivity
- Significant enhancement in the precision and sensitivity for challenging applications
- Multiple reflections, lower angle of incidence yields ~ 8 times higher absorbance
- Constant and reproducible effective pathlength
- User replaceable, pinned-in-place crystal plate for high precision

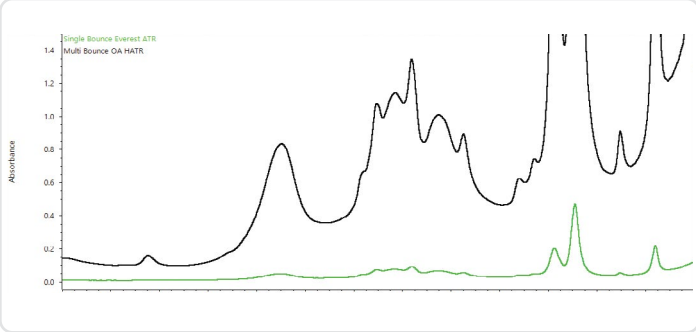

Figure 6: Comparison of liquid sample using both single-bounce (green) and multi-bounce (black) accessories showing the enhanced sensitivity of the Summit OA multi-bounce HATR accessory.

Summit OA applications

Snack food manufacturers

- Manage costs, verify quality of oil
- Consistent appearance of product

In-service lubricant analysis

- Conform to test standards (ASTM D7418, E2412, JOAP)
- Monitor oil conditions to keep fit for purpose

FAME content in diesel fuel

- Conform to test standard (ASTM D7371)
- Quality control of biodiesel blends

Customer-specific application

- Qualitative and quantitative analysis of product
- Cost effective, easy to use, provides robust data rapidly

Find out more at **thermofisher.com/summitOA**

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