Process Insights™

Premium Insights Into Process

PRODUCT BROCHURE

RefinIR™

Next Generation Laboratory Hydrocarbon Analyzer
for Automated Process Development

Superior Reliability

Fast And Precise

Maximize Profits

- Delivers automated spectral data acquisition of multiple liquid refinery stream samples from crude oils to blended gasoline and diesel

- Can provide process quality measurements

- Rapid collection supports model building

Laboratory Autosampler & FTIR Instrument

The all new RefinIR™ is a fully integrated laboratory autosampler and FTIR instrument.
It is designed to measure liquid hydrocarbons including gasoline, diesel and crude oils in a single autosampler. It features the Diamond 20™ Transept™ interferometer platform with the improved DCM 600™ data acquisition electronics. This provides improved performance utilizing SpectraQ software with a customizable HMI for operating the system. Determination of physical properties and chemical composition can be achieved with the touch of a button.

The RefinIR system automates the calibration data collection in support of the Hydrocarbon Smart System® online process analyzer.

Customer Benefits

With one touch of the button, SpectraQ software allows the user to automatically collect FTIR spectra of a full carousel of samples. In addition, the software provides the user the ability to perform a full ASTM D6122 validation to ensure spectral integrity.
• Automated data collection minimizes technician time
• Can provide process quality measurements
• Rapid collection supports model building

RefinIR Features

• Delivers automated spectral data acquisition of multiple liquid refinery stream samples
  from crude oils to blended gasoline and diesel
• Autosampler can be heated up to 125°C to allow sampling of heavy crudes and intermediates,
  such as FCC feed
• Holds 24, 15 ml vials and automatically transfers the sample to a flow-through transmission cell
  embedded in the auto-sampler
• Includes compliance to ASTM D6122 via a wash and validation functionality that eliminates
  cross-contamination of samples and provides a quick assurance of spectral quality
• Reduces the laboratory benchtop footprint of the prior RefinIR by up to 60%
• Newly designed carousel for robust operation

Experience And Support Makes A Difference

Our staff of applications experts provide feasibility and calibration services that set the worldwide standard. We also provide system integration and post-installation support to ensure your success. We also offer annual hardware maintenance and calibration modeling service support agreements.

SpectraQ Software Simplifies the Data Collection Process

With one touch of the button, SpectraQ software allows the user to automatically collect FTIR spectra of a full carousel of samples. In addition, the software provides the user the ability to perform a full ASTM D6122 validation to ensure spectral integrity.

• Full chemometric modeling capability including SpectraQuant is available. Optional third party chemometric software can be added including MATLAB®, Eigenvector SoloPredictor® and Unscrambler.

• Communications options – Modbus®, OPC® and ethernet to LIMS.
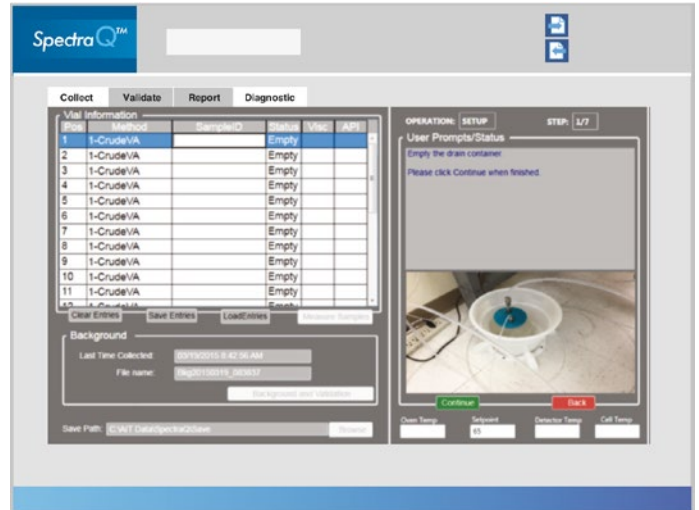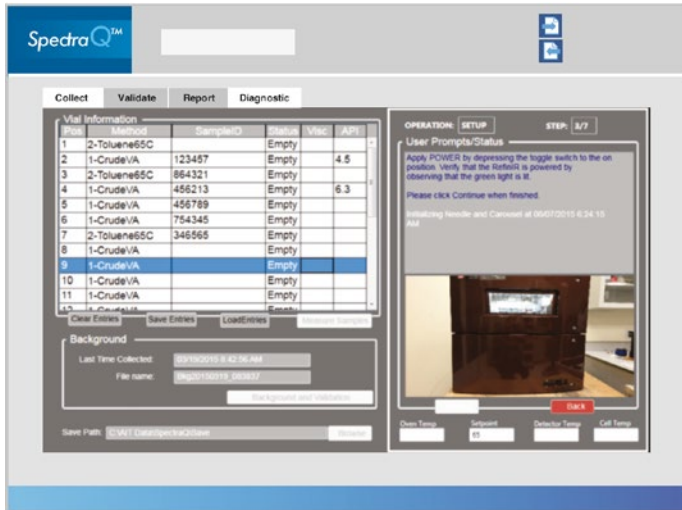
Specifications:	
Single-cell system for analyzing liquid hydrocarbons	
0.25 and 0.5 mm pathlength liquid transmission cell	
Maximum vial-to-vial cross contamination : < 0.1%	
Optibus™ optical transfer components integrate with the Diamond 20™ Transept interferometer	
Thermo-electrically stabilized DTGS detector	
115 VAC/60 Hz or 230 VAC 50/60 Hz	
Automated sampling system including carousel for twenty four (24) 15ml vials	
Two (2) liter vessels for wash and validation solvents	
Oven controllers and intrinsically safe sensors to enable the sampling of flammable and non-flammable samples over the range of 40°C +/- 1°C to 125°C +/- 1°C	
Analog input card for the host computer to read cell temperature	
Dimensions:	74H x 60W x 45D cm (29H x 24W x 18D in.) Weight: 90 kg (200 lbs)

GAIN REAL-TIME INSIGHT INTO YOUR PROCESS

Process Insights manufactures and delivers premium sensors, monitors, detectors, analyzers, instrumentation, and software that are mission-critical to keep your operations, personnel, and the environment safe – every day across the globe.

Get the most reliable, precision analytical technologies available on the market today. We will work to match your needs and budget, and provide the optimal, and most stable process analysis solution for your application.

CENTERS OF EXCELLENCE | PROVIDING PROVEN SOLUTIONS

Process Insights is committed to solving our customers' most complex analytical, process, and measurement challenges everyday.

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For a complete range of products, applications, systems, and service options, please contact us at: **info@process-insights.com**

For a complete list of sales & manufacturing sites, please visit: **https://www.process-insights.com/about-us/locations/**

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REVOLUTIONIZING MEASUREMENT

EVERYWHERE