

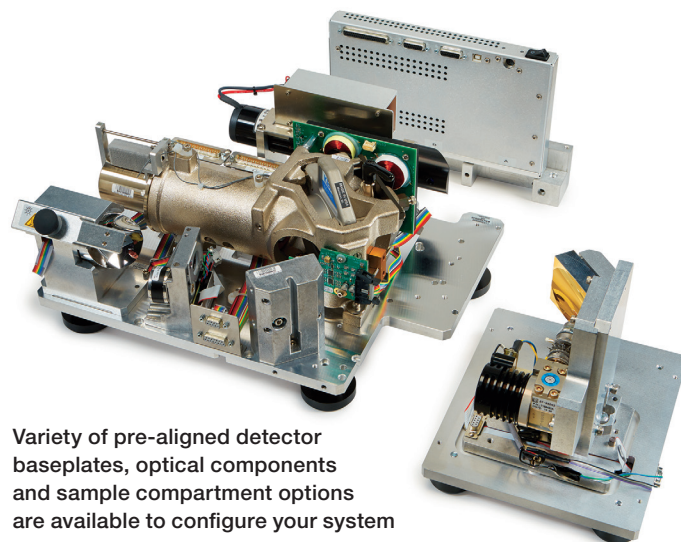
Thermo Scientific Nicolet iG50 spectrometer baseplate

A modular FTIR spectroscopy platform for OEM applications

The Thermo Scientific™ Nicolet™ iG™50 spectrometer baseplate offers a high-performance modular FTIR platform designed for industrial applications. The modular system allows for easy integration into your analyzer product.

Customizable solutions

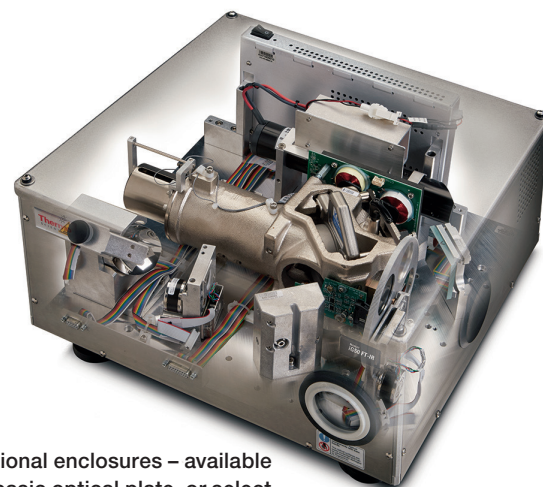
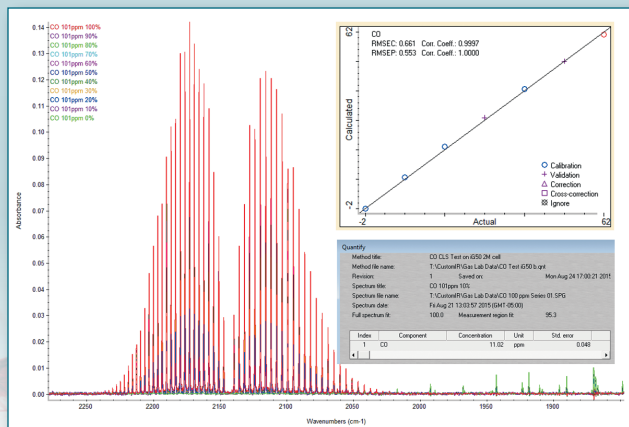
The Nicolet iG50 spectrometer baseplate provides the building blocks for your unique FTIR-based analyzers. Derived from optical and electrical components from our industry-leading Nicolet iS50 laboratory FTIR spectrometer, the Nicolet iG50 extends research-grade performance into the industrial environment. Our suite of “off-the-shelf” components is available to rapidly bring your concept from prototype to final product. Design your analyzer with confidence supported by over 35 years of FTIR spectroscopy experience.



Variety of pre-aligned detector baseplates, optical components and sample compartment options are available to configure your system

Best-in-class performance

The Nicolet iG50 spectrometer baseplate provides best-in-class capabilities offering the sensitivity, resolution and speed needed for demanding industrial and environmental applications.



Optional enclosures – available as basic optical plate, or select from sampling/optical interfaces and enclosures for a turnkey system

Serviceability

Together with excellent spectral performance the Nicolet iG50 spectrometer baseplate offers reliability and serviceability. Optical and electrical components are pre-aligned and tested as user-replaceable modules to maximize system uptime. Your investment is backed by a world-class support and service organization.

Spectrometer – standard features

- 90° Michelson Dynamically Aligned Interferometer
- Polaris High Stability, Long Lifetime Mid-IR Source
- 1.5" (38 mm) Collimated Output Beam
- Continuously Variable Iris Aperture
- Aluminum Coated Mirrors
- Validation/Attenuation Wheel
- 24 bit A/D Converter
- USB 2.0 Interface
- Helium Neon (HeNe) Reference Laser
- Configurable Front or Side Collimated Beam Output
- Continuous On-Board Hardware Monitoring
- User Replaceable Components: Source, Laser, Detector, Power Supply, Electronics Module
- Automated Performance Verification Testing
- Thermo Scientific™ OMNIC™ Software

Optical Components

Beam Output Options	Front or Right Side
Beamsplitter Options	Ge/KBr 7800–350 cm ⁻¹ ZnSe 7800–550 cm ⁻¹ (non-hygroscopic)
Detector Options	TE-cooled DLaTGS (KBr window) 12,500–350 cm ⁻¹ (non-hygroscopic, for industrial environments) MCT-High D* 11,700–800 cm ⁻¹ MCT-A 11,700–600 cm ⁻¹ MCT-B 11,700–400 cm ⁻¹ Customer Supplied Detector Interface

Thermo Fisher Scientific OEM partner program

Rely on Thermo Fisher Scientific to lend analytical expertise to your integrated systems and mitigate risks in your processes. Our experience in markets such as CEMS, Polymers, Oil and Gas, Semiconductors, Food and Beverage, and more allows us to assist with your system integration.

Performance Specifications

Signal to Noise	Peak to Peak – 30 μ A absorbance units RMS – 6 μ A absorbance units
Spectral Resolution	0.5 cm ⁻¹
Ordinate Linearity (DTGS)	0.07%T
Wavenumber Precision	Better than 0.01 cm ⁻¹
Scan Velocity (15 Values)	0.158–6.28 cm/sec

Physical Characteristics

Base Spectrometer Weight	29 kg (63 lbs)
Base Spectrometer (W x D x H)	Dimensions 45 x 42 x 25 cm 17.75 x 16.5 x 9.75 in.
Baseplate	Aluminum Alloy

Other

Spectrometer Warranty	1 year
Mid-IR Source/ Interferometer/Laser Warranty	5 years
Power Requirements	100–240 VAC, 2.5 A, 50–60 Hz
Regulatory Approvals (base spectrometer)	This laser product complies with the DHHS/CDRH requirements of 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser Notice No. 50, dated June 24, 2007

Find out more at www.thermofisher.com/oempartners

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