

HUMAN HEALTH

ENVIRONMENTAL HEALTH



# IR ON THE MOVE



PerkinElmer Frontier and Spectrum Two  
FT-IR, NIR and FIR Spectroscopy



# FRONTIER IR READY FOR ANY CHALLENGE



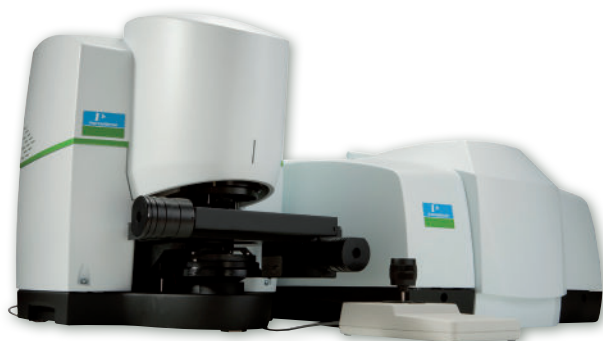
Frontier™ is PerkinElmer's most powerful, adaptable IR solution yet, specially developed to offer superior performance in demanding applications. With optimum sensitivity and configurability, Frontier meets any IR challenge – from high performance, everyday measurements to the most advanced, complex analyses.

Fully adaptable, Frontier can be expanded as research goals evolve. Its flexible, upgradable optical system offers superior spectra in the near, near-mid, mid, mid-far and far infrared regions. What's more, automated technology allows users to switch range at the touch of a button, freeing up more time for analysis.

Frontier's optical flexibility enables the addition of a vast array of specialized sampling accessories.

Whatever your sample, Frontier can be customised to meet specific needs. Simply switch the sampling accessory to address multiple applications using a single instrument. An extensive range of third party accessories is available to meet additional requirements, such as heatable sampling systems and gas cells.

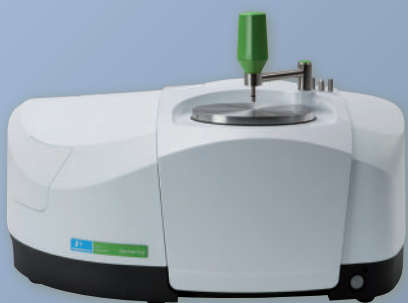
Whether you're looking to advance drug development, understand complex chemical and material properties, or meet the challenging requirements of research and academia, Frontier delivers optimal results – fast.



## Expanding capabilities with Frontier IR systems

- Choice of high performance IR microscopes and imaging systems allows identification of tiny impurities in virtually any matrix.
- Suitable for hyphenated techniques, e.g. TG-IR.
- More optimized sampling options than any other FT-IR in its class to meet any sampling challenge.
- PerkinElmer's patented technology ensures superior spectra regardless of your application.

# SPECTRUM TWO IR READY TO GO



With Spectrum Two™ from PerkinElmer, everyone can confidently perform fast, accurate IR analyses. Breaking new ground in operational simplicity, Spectrum Two is ideally suited to everyday analyses and will assure the quality of your materials across a wide range of applications.

Thanks to its robust, compact and transportable design, Spectrum Two can be used by everybody, everywhere. Highly portable with optional wireless connectivity and handheld PC control, it is at home both in the field and in the laboratory. OpticsGuard™ technology – a unique humidity shield – protects the instrument from environmental effects, while multiple power options allow Spectrum Two to be used with or without external mains power. Once powered, a fast warm-up ensures rapid measurements.

From in-service lubricants, pharmaceutical, nutraceutical, environmental and polymer analysis, and teaching these methods in academic laboratories, Spectrum Two can be used easily by everybody, no matter what their level of experience. Specialist systems using the unique Spectrum Touch™ software interface have also been developed to meet specific application needs.



## Fast and easy analysis with Spectrum Two

- Low maintenance design ensures confident use by everybody, everyday.
- Compact, robust and transportable design brings lab performance to non lab-environment.
- Intuitive Spectrum Touch interface provides a new level of operational simplicity.
- PerkinElmer's patented technology ensures superior spectra regardless of your application.

# OUR LONG HISTORY OF WINNING IR TECHNOLOGY

PerkinElmer has been at the forefront of IR innovation for over 65 years. Now, we've harnessed our experience and expertise to produce a platform that's equipped for any challenge – because every analysis application is different. Our latest innovations meet wide ranging IR needs across industries as diverse as pharmaceuticals, polymers, fuels, lubricants and nutraceuticals, as well as the environmental and academic spheres. With PerkinElmer, you can enjoy fast, reliable results, every time.



## Advancing spectroscopic analysis for over 65 years

- 1944 First IR spectrometer, the Model 12
- 1954 First commercial IR microscope
- 1957 First low-cost IR instruments
- 1975 First micro-processor controlled instrument, the Model 281
- 1984 First rotating mirror pair design FT-IR
- 1987 First low-cost FT-IR
- 1990 First all-Cassegrain-objectives FT-IR microscope
- 1991 First FT-IR company to gain ISO 9001 accreditation
- 1995 First validated FT-IR software, Spectrum for Windows®
- 1998 First FT-IR with smart accessory recognition
- 2001 First rapid-scanning chemical imaging system
- 2003 First FT-IR platform for both micro- and macro-scale analysis of pharmaceutical materials
- 2004 First on-site fully upgradeable microscopy system
- 2005 First integration of software sample table and remote sampling interfaces
- 2007 First FT-IR/FT-NIR spectrometer with automated range switching
- 2008 First high-accuracy FT-IR developed for optical filter measurements
- 2011 First laboratory performance, low maintenance and transportable FT-IR for everyday analysis

To access further information about this groundbreaking IR portfolio, visit:

[www.perkinelmer.com/SpectrumTwo](http://www.perkinelmer.com/SpectrumTwo) [www.perkinelmer.com/Frontier](http://www.perkinelmer.com/Frontier)

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