



OUT OF THE LAB AND INTO YOUR HANDS

AGILENT 4100 EXOSCAN FTIR SPECTROMETER

The Measure of Confidence



Agilent Technologies



AGILENT 4100 EXOSCAN FTIR

Take your samples to the lab for FTIR analysis, or take the analyzer to your samples. Either way, achieve superb, non-destructive analysis of your solid and liquid samples.

With the 4100 ExoScan FTIR, you can:

- Enjoy the convenience of a portable, handheld, battery-operated FTIR analyzer.
- Carry your analyzer with ease — it weighs a mere 3.2 kg, including data system and batteries.
- Achieve performance equal to or better than conventional laboratory FTIR spectrometers. A highly rugged, miniature interferometer with large diameter optics and very fast, short internal optical path makes this possible.
- Interchange sample interfaces to handle varying analytical challenges.
- Easily upload and download your data and methods between the PDA-based control panel and your laptop, using wireless connectivity.
- Continuously analyze for more than 3 hours, thanks to the powerful, onboard, rechargeable lithium ion battery.
- Tailor software access to each user so they can perform only those commands appropriate to their job function.
- Use the 4100 ExoScan in a lab, just like a benchtop FTIR, by mounting it on the docking station.



ANALYSIS OF: COMPOSITES, COATINGS, PAINTS, POLYMERS, LIQUIDS, SOLIDS & GELS

Unlimited applications

With the 4100 ExoScan FTIR, you are not limited to analyzing only samples that can be brought to the lab:

- Measure incoming raw materials and finished products onsite.
- Measure samples that are too large, inconvenient or valuable to move into the lab.

By taking the 4100 ExoScan to the sample, anything is possible.



Use the 4100 ExoScan FTIR to determine if:

- A metal surface is properly cleaned in preparation for a manufacturing process such as painting or coating.
- A surface is properly prepared for a bonding process.
- The correct coating has been applied to a surface and that the thickness of that coating is accurate and precise.
- A surface has the expected homogeneity.
- Anodization and alodining processes have been correctly carried out.
- Spots, streaks, stains, or blemishes on a surface are of concern.
- High value composite material has been damaged by heat, UV, or chemical exposure.
- Polymers and composites are properly cured.
- Incoming raw materials and outgoing finished products meet specifications.
- 'First article' vendor-supplied material meets specifications.
- Solids, liquids, gels and pastes meet specifications.

SYSTEM SPECIFICATIONS

Infrared module

Size	17.1 × 11.9 × 22.4 cm (6.75 x 4.68 x 8.81 in) (excluding handle and sample tech.)
Weight	3.18 kg (7 lb)
Sampling technology	Interchangeable External Reflectance and Single-Reflection Diamond ATR sampling heads
Interferometer	Michelson interferometer, 4 cm ⁻¹ max. resolution
Frequency range	4000–650 cm ⁻¹
Beam splitter	ZnSe
Detector	Temperature-stabilized DTGS
Buttons	Power on/off, handle-mounted 'Tab' and 'Enter'
Power supply input:	100–250 V AC 47–63 Hz, Output: 15 V DC Battery 10.8 V 4400 mAh lithium ion rechargeable (estimated 3.2 h run time)

Handheld computer

Size	12.7 × 7.5 × 2.1 cm (5.00 x 2.94 x 0.81 in)
Weight	179 g (6.3 oz)
Processor	Intel PXA270 @ 624 MHz
Operating system	Microsoft® Windows® Mobile 5.0 Premium Edition
Memory	128 MB SDRAM, 256 MB NAND FLASH
Display	65K colors TFT LCD, 3.5 in, 240 (w) x 320 (l) pixel resolution
Touch panel	Glass analog resistive touch
Power supply input:	100–240 V AC 47–63 Hz, Output: 5 V DC battery 3.7 V 1200 mAh lithium ion rechargeable (>8 h estimated run time)
Expansion slots	CompactFlash and SDIO slots
Wireless LAN	IEEE 802.11 b/g antenna: internal
Bluetooth	v2.0 + EDR Class 2 supported

Durability

Operating temperature	0 to 50 °C (32 to 120 °F)
Storage temperature	-25 to 75 °C (-13 to 167 °F)
Humidity	95% non-condensing
Water resistance	Completely sealed spectrometer compartment
Shock	Withstands 40 G on each axis (in shipping case)
Vibration	Withstands 60 Hz for 30 min

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Further information

For full details of the Agilent FTIR range of molecular spectroscopy products, ask for a brochure or visit our website at www.agilent.com/chem/FTIR/



Cary 600 Series FTIR Spectrometers

Publication number 5990-7783EN

Cary 610/620 FTIR Microscopes

Publication number 5990-7784EN

5500 Series FTIR Spectrometers

Publication number 5990-8094EN



Solutions for Polymers and Materials

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