Fourier Transform Infrared Spectrophotometer

IRTracer-100

IRTracer-100: Excellent Sensitivity, Speed, and Resolution
High-quality data of all sample types with unsurpassed speed and accuracy
Rapid data workup with user-friendly LabSolutions IR software
Shimadzu's advanced technology offers high performance for all IR Applications

Excellent Sensitivity and Reliability
- High sensitivity, High resolution, and High speed
- An Automatic dehumidifier and Advanced Dynamic Alignment make interferometer maintenance easily
- Self diagnostics and Monitoring technology assure accurate and reproducible results

A New Generation Workstation Designed for the Future
- Optimized for network applications
- Large spectral library with enhanced search functionality
- Automation with labor-saving macros

Meeting the Needs for a Wide Range of Analyses
- Automated Contaminant analysis and Identification test routines support your analytical tasks
- A wide variety of accessories is available to meet all FTIR applications
**Application**

**High sensitivity** with a 60,000:1 SN ratio

- Spectra of trace quantities of silicone oil contained in paraffine oil
  - Silicone 500 ppm
  - Silicone 200 ppm

Small peaks are obtained with high quality.

**High-resolution** spectra are achieved with a 0.25 cm⁻¹ resolution setting

- Spectra of ammonia gas
  - Resolution 0.5 cm⁻¹
  - Resolution 0.25 cm⁻¹

Close peaks are separated clearly.

**High-speed** analysis is easily achieved with a 20 Hz rapid scan feature

- Analysis of the curing reaction of a UV light curable resin
  - High-speed reaction is readily monitored.

**Specifications**

<table>
<thead>
<tr>
<th>Interferometer</th>
<th>Michelson interferometer (30° incident angle)</th>
<th>Equipped with Advanced Dynamic Alignment system</th>
<th>Sealed interferometer with Automatic Dehumidifier</th>
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</thead>
<tbody>
<tr>
<td>Light source</td>
<td>High-energy ceramic for Middle/Far IR (Standard) with a 3 year guarantee</td>
<td>Tungsten lump for Near IR (Optional)</td>
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<tr>
<td>Detector</td>
<td>DLATGS detector with temperature control for Middle/Far IR (Standard)</td>
<td>MCT (Hg-Cd-Te) with liquid nitrogen cooling for Middle/Near IR (Optional)</td>
<td>InGaAs for Near IR (Optional)</td>
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<thead>
<tr>
<th>Wavenumber range</th>
<th>7,800 to 350 cm⁻¹ (Standard)</th>
<th>12,500 to 240 cm⁻¹ (Optional)</th>
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<tbody>
<tr>
<td>Resolution</td>
<td>0.25, 0.5, 1, 2, 4, 8, 16 cm⁻¹ (Middle/Far IR)</td>
<td>2, 4, 8, 16 cm⁻¹ (Near IR)</td>
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<tr>
<td>SN ratio</td>
<td>60,000:1 or higher (Standard; 4 cm⁻¹ resolution, 1 min. scan, around 2,200 cm⁻¹, peak-to-peak)</td>
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<tr>
<td>Mirror speed</td>
<td>2.0, 2.8, 5, or 9 mm/sec</td>
<td>10, 20, 30, or 40 mm/sec for Rapid Scan (optional)</td>
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<tr>
<td>Data sampling</td>
<td>He-Ne laser with 30 months guaranteed</td>
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This product conforms to Shimadzu’s Eco-labeled designation.

*Energy savings: 34% reduction as compared to the previous model