

# Boost productivity with advanced hardware, software and optics



➤ **Why adopt the Thermo Scientific™ Nicolet™ iS50 Spectrometer:**

- **Fluid transition:** Minimize transition costs by using the same software, libraries and accessories you know and rely on
- **Reproducible operation:** Touch points enable automated set-up and operation of multi-range experiments
- **High performance applications:** Module integration for multi-modal analysis including FT-Raman, TGA-IR, GC-IR
- **Automated Multi-range:** High flexible and configurable (far-IR to visible) enabling a complete materials analysis workstation

➤ **Compare the Nicolet X700 to the Nicolet iS50**

	Thermo Scientific™ Nicolet™ X700	Thermo Scientific Nicolet iS50
Automated multi-ranging	<ul style="list-style-type: none"> <li>• Manual operation</li> </ul>	<ul style="list-style-type: none"> <li>• Automated beam splitter exchanger (no touch, no exposure to dust or moisture)</li> <li>• Automatic detector selection</li> </ul>
Built-in diamond ATR	<ul style="list-style-type: none"> <li>• Sample compartment accessories</li> </ul>	<ul style="list-style-type: none"> <li>• Built-in ATR with mid-far capabilities</li> <li>• In purge zone (always ready)</li> <li>• Leaves main sample compartment open for other accessories</li> </ul>
Sample compartment FT-Raman	<ul style="list-style-type: none"> <li>• Side mounted major accessory</li> </ul>	<ul style="list-style-type: none"> <li>• Small footprint</li> <li>• Built in stage permits maps</li> <li>• Automation highly dependable diode excitation</li> </ul>
TGA-IR Deformulation tools	<ul style="list-style-type: none"> <li>• Sample compartment accessory with single spectrum analysis tools</li> </ul>	<ul style="list-style-type: none"> <li>• Sample compartment accessory with complete deformulation analysis tools</li> <li>• Multi-component analysis with powerful reporting</li> </ul>
Long life source	<ul style="list-style-type: none"> <li>• 2-year source warranty; 2.5-year average lifetime</li> <li>• Hot spot can migrate</li> </ul>	<ul style="list-style-type: none"> <li>• 10-year source warranty; 10+ year average lifetime</li> <li>• No hot spot migration</li> </ul>
Multiple detectors to support multi-range and multi-modal use	<ul style="list-style-type: none"> <li>• 2 internal detectors, 3 external beams</li> </ul>	<ul style="list-style-type: none"> <li>• 5 internal detectors (3 sample compartment, BI-ATR, Raman)</li> <li>• 3 external beams</li> </ul>
Excellent environment control	<ul style="list-style-type: none"> <li>• Curved surfaces, loose seal</li> </ul>	<ul style="list-style-type: none"> <li>• Flat, tight seals</li> <li>• Purge shutter option</li> <li>• Excellent far-IR performance</li> </ul>
Warranty	<ul style="list-style-type: none"> <li>• 5-year (interferometer, laser)</li> <li>• 2-year (source)</li> </ul>	<ul style="list-style-type: none"> <li>• 10-year (interferometer, source)</li> <li>• 5-year (laser)</li> </ul>

Visit [thermofisher.com/is50](http://thermofisher.com/is50) to see how the Nicolet iS50 FTIR Spectrometer can boost lab productivity.