

Thermo Scientific Nicolet Summit FTIR Spectrometer

Reach the Peak of Productivity

Compact, capable, and connected – The Thermo Scientific™ Nicolet™ Summit™ FTIR Spectrometer delivers reliable data by minimizing the steps needed to measure and identify materials – all in a rugged, compact footprint. An integrated Windows® computer allows the instrument to stand alone. An optional touchscreen interface (shown right) helps save space and simplifies analysis even further.

- **Fast, trusted results** – the Nicolet Summit FTIR Spectrometer is designed with the Thermo Scientific™ LightDrive™ Optical Engine to improve data reproducibility and results; each instrument is tested and shipped to you with factory-verified specifications, guaranteeing actual, not typical or achievable, performance
- **Streamlined workflows** – the Thermo Scientific™ OMNIC™ Paradigm™ Software Suite provides automated workflow buttons on a simple touchscreen interface; workflows can be easily developed on the desktop software using a new, visual workflow builder
- **Real-time feedback** – a unique LED LightBar indicates how well your sample matches a reference spectrum and provides feedback on instrument status
- **Worry-free ownership** – a 10-year warranty on the source, laser, and interferometer backed by Unity™ Lab Services* provides unmatched confidence

The Nicolet Summit Spectrometer comes in two models; Standard or PRO. The Standard configuration is ideal for teaching labs, while the PRO model provides extra capabilities for industrial labs. Both models have enhanced connectivity with Wi-Fi and Ethernet along with access to our Thermo Scientific™ OMNIC™ Anywhere Cloud-based Application, allowing you to share data anytime, anywhere, and on any device.

*Only available in North America and selected European countries. Qualified dealer network support available outside these regions.



	Nicolet Summit	Nicolet Summit PRO
LightDrive Optical Engine (laser, source, interferometer)	●	●
10-year warranty on LightDrive laser, source, and interferometer	●	●
Integrated Windows® 10 computer	●	●
Wi-Fi enabled	●	●
Touchscreen available	●	●
OMNIC Paradigm Software	●	●
Thermoelectrically cooled (TEC) DTGS detector		●
Internal motorized aperture		●
Included library/reference spectra	5,000	10,000
Pharmacopeia workflows	Included	Included

Find out more at thermofisher.com/summit

Specifications

Spectral Range:	8,000–350 cm ⁻¹ optimized, mid-infrared KBr beamsplitter	Touchscreen Software:	Touchscreen software features include: <ul style="list-style-type: none"> • Multi-point, ultra-responsive touchscreen display • Simplified visual layout for streamlined applications • Screen tap simplicity to run dedicated workflows and analyses • Spectral viewer with basic processing tools (i.e., peak area)
Spectral Resolution:	Summit Spectrometer – better than 0.6 cm ⁻¹ Summit PRO Spectrometer – better than 0.45 cm ⁻¹ (superior line shapes)	OMNIC Security Suite Software:	<ul style="list-style-type: none"> • Full Security Administration software with permission and access rights validation • Digital signature and electronic data security compliant • Database infrastructure for advanced tracking and complete audit trail • Audit Manager software with spectral process and system audit trail viewer
Signal-to-noise:	Summit Spectrometer – 35,000:1 (peak-to-peak, one minute) Summit PRO Spectrometer – 40,000:1 (peak-to-peak, one minute)	Performance Verification and Regulatory Compliance:	<ul style="list-style-type: none"> • Automated performance verification tests (ASTM E1421) to meet customer GLP requirements • System suitability tests for complete, customizable system performance assurance • Internal NIST-traceable 1.5 mil polystyrene film (serialized) • Compliant with latest pharmacopeia methods (Ph. Eur, USP, JP, and CP) • 21 CFR Part 11 compliance available, including installation and operation qualification (IQ/OQ)
Wavenumber Precision:	0.001 cm ⁻¹ at 2,000 cm ⁻¹	Sampling Accessories:	Open sample compartment provides compatibility with Nicolet iS5 iD Accessories and hundreds of other third-party accessories
Wavenumber Accuracy:	0.05 cm ⁻¹ at 2,000 cm ⁻¹	Optical Housing:	All optics are sealed in a magnesium alloy chassis for enhanced durability, robustness, and moisture control
Ordinate Linearity (ASTM E1421):	<0.15 %T deviation from 0.0%T	Serviceability:	<ul style="list-style-type: none"> • User-replaceable components (without opening cover): Desiccant, power supply, sample compartment windows, infrared source • No manual alignment required • Service contracts available from Unity™ Lab Services or qualified dealer network
Infrared Source (LightDrive):	Non-migrating hotspot, single-point source for unmatched data reproducibility (>10 years)	Warranty:	1 year on complete system, 5 years on Thermo Scientific™ Everest™ Diamond ATR, 10 years on interferometer, laser, and source
Laser (LightDrive):	Solid-state, temperature controlled diode laser with long lifetime (>10 years)	Humidity and Vapor Protection:	<ul style="list-style-type: none"> • Tightly sealed and desiccated optical compartment with protective KBr windows • Optional ZnSe windows available for environments with excessive humidity • Rechargeable desiccant cartridges with humidity indicator
Interferometer (LightDrive):	Dynamically aligned interferometer with KBr/Ge mid-infrared beamsplitter optimized for highest spectral throughput (>10 years lifetime)	Diagnostics:	<ul style="list-style-type: none"> • Continuous electronic monitoring of multiple spectrometer components with temperature and humidity sensors • Diagnostic status displayed on LightBar
Detector:	Summit Spectrometer – Fast-recovery deuterated triglycine sulfate (DTGS) Summit PRO Spectrometer – thermoelectrically cooled (TEC) DTGS for maximum detector response linearity	Training and Help:	Free online training videos and help articles, including unpacking, getting started, and advanced applications
Size (W x H x D):	Standard configuration: 34 cm x 24 cm x 32 cm; (13.3 in. x 9.6 in. x 12.7 in.) With touchscreen: 53 cm x 43 cm x 32 cm; (20.8 in. x 17.0 in. x 12.7 in.)	Operating Systems:	Microsoft® Windows® 10 (64-bit)
Weight:	Standard configuration – 10.9 Kg (24 lbs) With touchscreen – 12.6 Kg (27.8 lbs)		
Power Consumption:	100-240 VAC, 47-63 Hz, 110 W		
User Interface/Connection:	<ul style="list-style-type: none"> • Integrated touchscreen for local control on the instrument (optional) • Mini-display port connection to monitor • Ethernet connection to laptop computer • Wireless/Remote control via WLAN (optional) 		
LightBar:	Multi-colored LED bar displays system status and spectral library match value/QCheck result		
Background collection:	<ul style="list-style-type: none"> • Standard background collection (i.e., user initiated) • Smart Background collection (background collected while instrument is idle) 		
Desktop Software:	<p>The Nicolet Summit FTIR Spectrometer is powered by OMNIC Paradigm Software. Desktop software features include:</p> <ul style="list-style-type: none"> • Dashboard/Home screen for quick access of recent work • Visual, drag and drop workflow creator with example templates • Live displays of data collection and spectral data preview • Connectivity to OMNIC Anywhere Cloud-based Application • Smart Background feature cuts measurement time by 50% • Advanced instrument health information tracking (optional) • Flexible, one-click library creation • Pre-defined reporting templates exportable to Microsoft Office Suite • Multi-component search functionality • Full spectral processing and analysis tools (baseline correction, spectral math, peak area, peak height, etc...) • Quantification prediction for Beer's Law, PLS, CLS, etc... • Automated workflow creator based on spectral processing history • Multiple project windows and multi-monitor support 		