

FT-NIR Spectrometer QuasIR™ 2000



GECKO 

Gecko Instruments GmbH
Maria-Merian-Straße 8
85521 Ottobrunn
Deutschland / Germany
Tel: +49 (0) 89 - 189 1405 - 0
Fax: +49 (0) 89 - 189 1405 - 29
Email: info@gecko-instruments.de
Website: <http://www.gecko-instruments.de>



FT-NIR Spectrometer QuasIR™ 2000

Portability without Compromise

- ▶ Compact and Portable
- ▶ High Performance
- ▶ Easy to use
- ▶ Ready for the road or lab
- ▶ Low cost of ownership
- ▶ Low maintenance
- ▶ Direct calibration transfer
- ▶ Rugged, insensitive to vibration
- ▶ Wide operating temperature range
- ▶ Flexible, easy to use software
- ▶ Universal SMA 905 fiber connection
- ▶ Instrument to instrument consistency

Versatility

The QuasIR™ 2000 was designed from the ground up to offer the industry a new kind of NIR analysis solution - a solution that brings together the portability required to move NIR analysis closer to point-of-need, combined with unmatched spectroscopic performance for the fastest and most accurate results.

Innovation

The QuasIR™ 2000 delivers a wide range of technical innovations including our PermAlign™ interferometer optics, industry leading sampling accessory designs, networked fleet management, and new concepts in software and algorithms such as our Advanced-ID™ software for low concentration targeted screening.

Consistency

The QuasIR™ 2000 was engineered to ensure direct calibration transfer without the frustration of standardizing instruments or adjusting models to accommodate excessive instrument variability. The heart of the QuasIR™ 2000 is our PermAlign™ optics technology, an innovative optical design that maintains alignment and performance under conditions from the routine to the extreme. Our technology and design ensure unmatched consistency and direct methods transfer with no loss in performance so you can expand your QuasIR™ fleet with confidence.



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Universal Connection & Proprietary Probe Design

The QuasIR™ 2000 has two standard SMA 905 connectors, allowing it to be used with any commercially available probes also fitted with SMA 905 connectors. It can also couple with fiber coupled collimators, transmission cells, and other accessories.

The proprietary probe design using a reproducible fiber layout increases the consistency between probes. The fiber layout ensures that, with the exception of six fibers at the edges, all the launch fibers are surrounded by collection fibers. This maximizes the amount of reflected light collected by the probe. The number and diameter of the launch fibers was designed to throughput match the interferometer, maximizing performance.

This probe also comes with an adjustable probe stand and sample platform. The probe stand has a folding design for portability, and non-slip feet for stability. It's height and angle can be adjusted to suit application needs.



Ready for the Road

At just 35.5 x 24.1 x 14.5 cm and 7.1 kg, the QuasIR™ 2000 is made for analysis on-the-go. The QuasIR™ 2000 fits conveniently into its hard carry-on travel case. The travel case contains everything you need to operate the QuasIR™ 2000. The QuasIR™ 2000 can operate from mains power (110 - 240 VAC), battery (12V, 3A), or vehicle power (12V, 3A). This gives you the capability to power the QuasIR™ 2000 anywhere you need it.



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General Specification

Dimensions	35.5 x 24.1 x 14.5 cm (W x D x H)
Weight	< 7.1 kg
Communication	USB
Operating Temperature	0 - 40°C
Enclosure Protection	NEMA 13 / IP54 (dust)
Laser Life	> 10 years
NIR Source Life	> 20,000 hours, user replaceable

Performance Specifications

Wavelength Range	12,800 - 4,000 cm^{-1} / 785 - 2500 nm
Spectral Resolution	Better than 4 cm^{-1}
Wavelength Accuracy	< 0.1 cm^{-1} @ 7181.68 cm^{-1}
Wavelength Repeatability	< 0.05 cm^{-1} @ 7181.68 cm^{-1}
Photometric Accuracy	Better than 0.1% T
Noise	Better than 20 micro au