

FT-NIR Spectrometer QuasIR™ 3000



GECKO 

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FT-NIR Spectrometer QuasIR™ 3000

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
- ▶ Large sampling area
- ▶ Instrument to instrument consistency

Versatility

The QuasIR™ 3000 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™ 3000 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™ 3000 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™ 3000 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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Large Sampling Area

Experts know that good NIR results always start with good sampling and this means a large measurement spot size and the largest possible sampling volume. With this in mind the QuasIR™ 3000 was engineered with an enhanced 23 mm sampling area, which is up to 5 times larger than leading competitive products. Our large sampling area with scratch resistant sapphire window helps produce better and more reproducible results.

An internal background shutter mechanism permits automatic collection of background scans without the need for external reference materials or user interaction. An optional easy to attach spinner further increases the sampling area, and various sampling cups and accessories increase the versatility of the instrument.



QuasIR 3000 Sample Spinner and cups



25 mm Sampling Area
○ Quasir 3000 ● Competitor



Ready for the Road

At just 44.0 x 24.1 x 14.5 cm and 8.25 kg, the QuasIR™ 3000 is made for analysis on-the-go. The QuasIR™ 3000 fits conveniently into its hard carry-on travel case. The travel case contains everything you need to operate the QuasIR™ 3000. The QuasIR™ 3000 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™ 3000 anywhere you need it.



FT-NIR Spectrometer QuasIR™ 3000

General Specification

| | |
|-----------------------|-----------------------------------|
| Dimensions | 44.0 x 24.1 x 14.5 cm (W x D x H) |
| Weight | < 8.25 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 |