



# QuasIR™ 2000 Fiber Optic FT-NIR

## Portability without Compromise

- Compact and Portable
- High Performance
- Easy-to-use
- Suitable for the road, lab, or factory
- 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 PermaAlign™ 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.

## 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.



## Consistency

The QuasIR™ 2000 is designed to ensure direct calibration transfer without the frustration of standardizing instruments or adjusting models to accommodate excessive instrument variability. Our technology and design ensure unmatched consistency and direct method transfer with no loss in performance, so you can expand your QuasIR™ fleet with confidence.

## Key Applications:

Food Processing/Authentication



Polymers and Plastics



Chemicals/Refining



Pharmaceuticals





# QuasIR™ 2000 FT-NIR

## System Specifications

General Specification	Value	Alt. Value/Benefit
Dimensions	35.5 x 24.1 x 14.5cm (W x D x H)	13.98 x 9.49 x 5.71 in
Weight	< 8.2kg	< 18 lbs.
Power Supply	12V / 3A Supply, 60W max	
Communication	USB	
Operating Temperature	0° to 40°C, < 95% humidity non-condensing	32° to 104°F
Enclosure Protection	NEMA 4 / IP65	
Sampling Mode	Diffuse Reflectance for solids, Transmission for liquids, Trans-reflectance for slurries	
Sampling Device	Different types of probes and accessories	Maximum signal and collection efficiency
Automated Verification & Instrument Diagnostics	Automatic, internal, 4-position validation wheel	Continuous performance monitoring
<b>Performance Specifications</b>		
Wavelength Range	12,000 - 4,000 cm <sup>-1</sup>	833 - 2,500 nm
Spectral Resolution	Better than 4 cm <sup>-1</sup>	< 0.3 nm @ 870 nm
Wavelength Accuracy	< 0.05 cm <sup>-1</sup> @ 7181.68 cm <sup>-1</sup>	< 0.01nm @1392 nm
Wavelength Repeatability	< 0.035 cm <sup>-1</sup> @ 7181.68 cm <sup>-1</sup>	<0.007 nm@1392 nm
Photometric Accuracy	Better than 0.1% T	
Signal-to-Noise Ratio	> 20,000:1	Excellent sensitivity
Noise	Better than 20 micro au	Low detection limit
Detector	TE cooled InGaAs	
Data Acquisition A/D converter	24-bit high speed Delta-Sigma	
<b>Reliability Specifications</b>		
Laser Life	> 10 years	Low downtime & ownership costs
NIR Source Life	> 20,000 hours, user replaceable	Low downtime & ownership costs
Desiccant	User replaceable	Low ownership costs
<b>Regulatory Compliance</b>		
EMC directive 2004/108/EC	Complies	
RoHS directive 2002/95/EC	Exempt	
WEEE directive 2002/96/EC	Complies	