



QuasIR™ 2000E FT-NIR for Process Analytics

ADVANTAGES

- High Performance
- Low cost of ownership
- Direct calibration transfer
- Ruggedized enclosures available for outdoor installation
- Wide operating temperature range
- Flexible software
- Instrument-to-instrument consistency
- Large spot sampling – from 3" to 6" customizable to application needs
- 18" to 30" working distance
- Up to 200W of illumination
- Customize alarms, inputs, and outputs
- Continuous measurement of multiple parameters simultaneously
- Non contact and non destructive measurements

Versatility

Galaxy Scientific's new **QuasIR™ 2000E** is designed for true continuous measurement of the chemical composition of material transported on a conveyor belt, through a pipe, or in a chute. The analysis spot size can be set as small as 3" and as large as 6" in diameter and can be custom tailored to applications needs. Varied working distances, spot sizes, and illumination areas available.

Innovation

The QuasIR™ 2000E uses FT-NIR technology to deliver the most repeatable and accurate real-time results. Our rugged PermaAlign™ interferometer optics delivers results in environments where other interferometers fail. Complete compatibility with popular process control and chemometric software means the QuasIR™ 2000E can be integrated into almost any process environment.

Key applications include mining, food production, web processing, in-process quality control, and more. Gain real-time insight into mixing, drying, curing, baking, polymerization, and in-process concentrations. Monitor processes for critical quality parameters.

Consistency

The QuasIR™ 2000E 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:

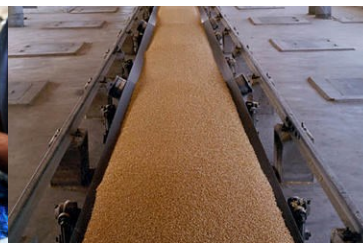
Mining



Polymers and Plas-



Agriculture



Food Processing/Quality Control





QuasIR™ 2000E 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	< 8.2 kg	< 18 lbs.
Power Supply	12V / 3A Supply, 60W max	
Communication	USB	
Operating Temperature	0° F - 40°C, < 95% humidity, non-condensing	32° to 104°F
Enclosure Protection	IP55 (dust and water); Temperature controlled enclosure available	NEMA 4; Weatherproof enclosure available
Sampling Mode	High powered tungsten lamps illuminate the sample from as far as 24", collecting scattered reflection off the sample through a fiber optic cable	
Sampling Device	External Projection Optics, Fiber Optic Cable	Maximum signal and collection efficiency
Automated Verification & Instrument Diagnostics	Automatic, internal, 4-position validation wheel	Continuous performance monitoring
Performance Specifications		
Wavelength Range*	12,800 - 4,000 cm ⁻¹	785 - 2,500 nm
Spectral Resolution	Better than 4 cm ⁻¹	< 0.3 nm @ 870 nm
Wavelength Accuracy	< 0.05 cm ⁻¹ @ 7181.68 cm ⁻¹	< 0.01 nm@1392 nm
Wavelength Repeatability	< 0.05 cm ⁻¹ @ 7181.68 cm ⁻¹	<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	
Reliability Specifications		
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
Regulatory Compliance		
EMC directive 2004/108/EC	Complies	
RoHS directive 2002/95/EC	Exempt	
WEEE directive 2002/96/EC	Complies	

* Depends upon probe/optical configuration