

NIRS XDS Interactance OptiProbe Analyzer



Robust measuring system for monitoring reactions in
technical centers and pilot plants



The NIRS XDS Interactance OptiProbe Analyzer enables straightforward and reliable monitoring of chemical reactions both in the technical center and in pilot plants. The NIRS XDS Interactance OptiProbe Analyzer provides precise results on the identity and quality of many different samples in method development as well as in the scale-up of production processes.

While the reflection probe measures solids, highly dispersive liquids and slurries, the immersion probe is used to analyze aqueous products, clear liquids, and solvents. The probe is connected to the analyzer via an optical fiber, which enables it to take reliable measurements even in the harsh conditions of the process environment.



The NIRS XDS Interactance OptiProbe Analyzer is ideal for:

- monitoring reactions in both technical centers and pilot plants
- developing methods and scaling up production processes

User benefits

- Simple and efficient monitoring of chemical reactions
- Saves time and money – no need to prepare samples; provides analytical results in real-time
- Universal application, suitable for both liquids and solids

Key features

- Quick probe changeover for liquids and solids
- Network-compatible – central result and data management (client-server solution)
- Universal interface for quickly changing the measuring modules in just a few seconds

Technical specifications

Measuring mode	Reflection and transflection
Sample interface	Direct analysis
Wavelength range	400–2,500 nm
Measuring module	Hot-swappable
Detectors	Silicon (400–1,100 nm), lead sulfide (1,100–2,500 nm)
Data collection speed	2 scans/s
Data point interval	0.5 nm
Wavelength accuracy (currently recognized standard)	< 0.08 nm (SRM 1920)
Wavelength precision¹	< 0.008 nm
Wavelength precision² (instrument to instrument)	< 0.025 nm
Stray light	< 0.1% at 2,300 nm
Photometric linearity	< 1% of the measured value
Bandpass	8.75 ± 0.10 nm
Noise (RMS)	
400–700 nm	< 80 micro AU
700–2,200 nm	< 30 micro AU
Weight	34.0 kg (74.0 lbs)
Dimensions (W × H × D)	455 × 346 × 559 mm (17.9" × 13.6" × 22")
Operating temperature range	4.5–35°C (40–95°F)
Relative humidity	10–90% RH, non-condensing

¹ based on a single analyzer

² based on a group of analyzers

Ordering information

2.921.1510 NIRS XDS Interactance OptiProbe Analyzer

Comprised of:

- 1.921.0010 NIRS XDS Monochromator
- 1.921.0510 NIRS XDS Interactance OptiProbe Module
- 6.7400.000 NIRS XDS accessory kit
- 6.7430.080 Interchangeable probe as an assembly
- 8.912.8006EN Manual for NIRS XDS Interactance OptiProbe

Requires Vision Air software (select one of the following versions)

- 6.6072.208 Vision Air 2.0 Complete
- 6.6072.207 Vision Air 2.0 Network Complete
- 6.6072.209 Vision Air 2.0 Pharma Complete
- 6.6072.210 Vision Air 2.0 Pharma Network Complete

Requires certified standards

- 6.7450.030 NIRS 99% reflection standard for lab probes

Additional required certified standards (select one of the following)

- 6.7450.000 NIRS reflection standard, set of 2
- 6.7450.010 NIRS reflection standard, set of 7 (for the regulated range)

www.metrohm-nirs.com