

# NIRS XDS SmartProbe Analyzer



Robust and flexible measuring system for the quality control of solid and liquid substances

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The NIRS XDS SmartProbe Analyzer enables fast, non-destructive analyses of solid and liquid substances and formulations. The NIRS XDS SmartProbe Analyzer can directly determine the identity and quality of a substance in its original transport containers; be it bottles, bags, or other containers. The analyzer's robust and ergonomic design make the NIRS XDS SmartProbe Analyzer the ideal quality control solution in both the warehouse and in the laboratory.

Using the NIRS XDS SmartProbe Analyzer couldn't be easier. To take a measurement, the probe is simply put in the sample and the measuring button is pressed. Pass/fail results can immediately be read from the handle after the measurement.

**The NIRS XDS SmartProbe Analyzer is ideal for:**

- straightforward control tests on raw materials
- taking measurements directly in the transport containers and/or through transparent packaging
- replacing other more costly routine tests



## User benefits

- Saves time and money – no need for sample preparation; provides analysis results in real-time
- Simple to use – results at the press of a button
- Universal application, suitable for both liquids and solids

## Key features

- Robust design for use in the warehouse and in production
- Quick change between probes for liquids and solids
- Measurements across the whole wavelength spectrum (400–2,500 nm)
- Network-compatible – central result and data management (client-server solution)
- Universal interface for quickly changing the measuring modules in just seconds

## Technical specifications

<b>Measuring mode</b>	Reflection and Transflection
<b>Sample interface</b>	Direct analysis
<b>Wavelength range</b>	400–2,500 nm
<b>Measuring module</b>	Hot-swappable
<b>Detectors</b>	Silicon (400–1,100 nm), lead sulphide (1,100–2,500 nm)
<b>Data collection speed</b>	2 scans/s
<b>Data point interval</b>	0.5 nm
<b>Wavelength accuracy (currently recognized standard)</b>	< 0.08 nm (SRM 1920)
<b>Wavelength precision<sup>1</sup></b>	< 0.008 nm
<b>Wavelength precision<sup>2</sup> (instrument to instrument)</b>	< 0.025 nm
<b>Stray light</b>	< 0.1% at 2,300 nm
<b>Photometric linearity</b>	< 1% of the measured value
<b>Bandpass</b>	8.75 ±0.10 nm
<b>Noise (RMS)</b>	
400–700 nm	< 80 micro AU
700–2,200 nm	< 30 micro AU
<b>Weight</b>	34.0 kg (83.0 lbs)
<b>Dimensions (W × H × D)</b>	455 × 346 × 559 mm (17.9" × 13.6" × 22")
<b>Operating temperature range</b>	4.5–35°C (40–95°F)
<b>Relative humidity</b>	10–90% RH, non-condensing

<sup>1</sup> based on a single analyzer

<sup>2</sup> based on a group of analyzers

## Ordering information

**2.921.1610** NIRS XDS SmartProbe Analyzer, 2 m fiber

**2.921.1620** NIRS XDS SmartProbe Analyzer, 3 m fiber

### **Comprised of:**

1.921.0010 NIRS XDS Monochromator  
1.921.0610 NIRS XDS SmartProbe Module, 2 m fiber  
or 1.921.0620 NIRS XDS SmartProbe Module, 3 m fiber  
6.7400.000 NIRS XDS accessory kit  
6.7430.080 Interchangeable probe as an assembly  
8.921.8004EN Manual for NIRS XDS SmartProbe Analyzer Operation Manual

### **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 environment)

[www.metrohm-nirs.com](http://www.metrohm-nirs.com)

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