



# NIRS XDS RapidLiquid Analyzer

2.921.1410

Rapid, precise analyses of liquids and suspensions of all types.

The NIRS XDS RapidLiquid Analyzer enables rapid, precise analyses of liquid formulations and substances. Precise measurement results at the push of a button make the NIRS XDS RapidLiquid Analyzer an equally reliable and simple solution for quality monitoring in laboratories and processes. The samples are transferred to quartz cuvettes designed for multiple use or disposable glass vials; a tempered sample compartment ensures reproducible analysis conditions and thus accurate measurement results.

Below, the accessories are grouped into Scope of delivery and Optional accessories.

Please keep this printout at hand for ordering replacement material.

These lists may be subject to change.

## Scope of delivery 2.921.1410

Qt.	Order no.	Description
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The result of 50 years experience in the area of spectroscopy was incorporated in the development of this NIRSystems spectrometer. The unique technology improves the signal-noise ratio at high resolution and enhances accuracy and precision. The patented monochromator and the modular design of the measuring module system make NIRSystems instruments indispensable for the spectral measurement of every imaginable sample type in the visible and near-infrared wavelength range (400 - 2,500 nm). The measuring modules can be replaced without difficulty, even during operation. This means that the user profits from the great flexibility in all areas of application.



Rapid, precise analyses of liquids and suspensions of all types

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Accessory kit for NIRS XDS laboratory monochromators



## Optional accessories

Order no.	Description
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6.6072.207 Vision Air 2.0 Network Complete

Vision Air - Universal spectroscopy software.

Vision Air Network is a modern and simple-to-operate software solution. The network version enables the structuring of a global server-client network with a central database.



Overview of the advantages of Vision Air:

- Individual software applications with adapted user interfaces ensure intuitive and simple operation
- Centralized data and instrument management
- Simple configuration and updating of several devices in just a few steps

The Vision Air Network Complete version (66072207) contains all applications for quality assurance using Vis-NIR spectroscopy:

- Application for a global instrument and data management
- Application for method development
- Application for routine analysis

Vision Air - Universal spectroscopy software.

Vision Air Complete is a modern and simple-to-operate software solution for use in a regulated environment.



Overview of the advantages of Vision Air:

- Individual software applications with adapted user interfaces ensure intuitive and simple operation
- Simple creation and maintenance of operating procedures
- SQL database for secure and simple data management

The Vision Air Complete version (66072208) includes all applications for quality assurance using Vis-NIR spectroscopy:

- Application for instrument and data management
- Application for method development
- Application for routine analysis

Additional Vision Air Complete solutions:

- 66072207 (Vision Air Network Complete)
- 66072209 (Vision Air Pharma Complete)
- 66072210 (Vision Air Pharma Network Complete)

Vision Air - Universal spectroscopy software.

Vision Air Pharma Complete is a modern and simple-to-operate software solution for use in regulated environments.



Overview of the advantages of Vision Air:

- Individual software applications with adapted user interfaces ensure intuitive and simple operation
- Simple creation and maintenance of operating procedures
- SQL database for safe and simple data management
- In compliance with all requirements pursuant to Title 21 CFR Part 11

The Vision Air Pharma Complete version (66072209) contains all applications for quality assurance using Vis-NIR spectroscopy:

- Application for instrument and data management
- Application for method development
- Application for routine analysis

Vision Air - Universal spectroscopy software.

Vision Air Pharma Network Complete is a modern and simple-to-operate software solution. The network version enables the setup of a global server-client network with a central database.



Overview of the advantages of Vision Air:

- Individual software applications with adapted user interfaces ensure intuitive and simple operation
- Centralized data and instrument management
- Simple configuration and updating of several instruments in just a few steps
- In compliance with all requirements pursuant to Title 21 CFR Part 11

The Vision Air Pharma Network Complete version (66072210) contains all applications for quality assurance using Vis-NIR spectroscopy:

- Application for a global instrument and data management
- Application for method development
- Application for routine analysis

Pre-calibration for determination of the hydroxyl number in polyols by means of NIR spectroscopy.



6.6072.302 Pre-calibration for crude palm oil analysis

Determination of iodine number, moisture, and free fatty acids in crude palm oil.



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6.6072.303 Pre-calibration for crude palm kernel oil analysis

Determination of iodine number, moisture, and free fatty acids in crude palm kernel oil.



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6.6072.304 Pre-calibration for RBD palm oil analysis

Determination of iodine number, moisture, and free fatty acids in RBD palm oil



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6.6072.305 Pre-calibration for diesel analysis

Determination of cetane index und cetane number, as well as density, cold filter plugging point, flash point and sulfur in diesel fuel.



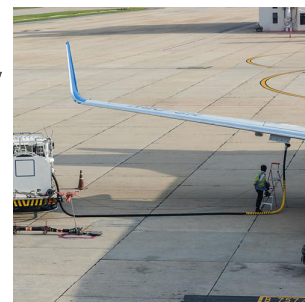
6.6072.306 Pre-calibration for gasoline analysis

Determination of octane number, LCI, benzene, aromatic compounds, olefins, oxygen and density in gasoline.



6.6072.307 Pre-calibration for kerosine analysis

Determination of cetane index, aromatic compounds, density, flash point, hydrogen, viscosity and other parameters in kerosine.



6.7401.040 NIRS XDS quartz cuvette, screw top, 20 mm pathlength

Quartz cuvette, screw top, with 20 mm pathlength for the recording of a spectrum of volatile liquids in transmission using an NIRS XDS RLA Analyzer.



6.7401.110 NIRS XDS quartz cuvette with open top, 0.5 mm pathlength

Open quartz cuvette with 0.5 mm pathlength for the recording of a spectrum of liquids in transmission using an NIRS XDS RLA Analyzer.





6.7401.200 Quartz cuvette, 1 mm

Quartz glass cuvette with a window made of quartz glass of maximum purity and homogeneity. The cuvettes have a transmission of more than 80% in the wavelength range of 200–2500 nm.

Compatible with:

- NIRS Spacer for set of 12.5 mm cuvettes (6.7403.180)
- DS2500 holder for 1 mm cuvette (6.7492.100)
- Holder OMNIS NIR, cuvette, 1 mm (6.07401.010)



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6.7401.210 Quartz cuvette, 2 mm

Quartz glass cuvette with a window made of quartz glass of maximum purity and homogeneity. The cuvettes have a transmission of more than 80% in the wavelength range of 200–2,500 nm.

Compatible with:

- NIRS Spacer for set of 12.5 mm cuvettes (6.7403.180)
- DS2500 holder for 2 mm cuvette (6.7492.110)
- Holder OMNIS NIR, cuvette, 1 mm (6.07401.010)



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6.7401.220 Quartz cuvette, 5 mm

Quartz glass cuvette with a window made of quartz glass of maximum purity and homogeneity. The cuvettes have a transmission of more than 80% in the wavelength range of 200–2500 nm.

Compatible with:

- NIRS Spacer for set of 12.5 mm cuvettes (6.7403.180)
- DS2500 holder for 5 mm cuvette (6.7492.120)
- Holder OMNIS NIR, cuvette, 5 mm (6.07401.030)



6.7401.230 Quarzküvette, 10 mm

Quarzglasküvette mit einem Fenster aus Quarzglas in höchster Reinheit und Homogenität. Die Küvetten haben eine Transmission von über 80% im Wellenlängenbereich von 200 nm - 2500 nm.

Kompatibel mit:

- NIRS Spacer für 12.5 mm Küvettenset (6.7403.180)
- DS2500 Halter für 10 mm Küvette (6.7492.130)
- Halter OMNIS NIR, Küvette, 10 mm (6.07401.040)



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6.7401.300 Flow-through cell, 0.5 mm

Flow quartz cuvettes with quartz glass window and an optical path length of 0.5 mm suitable for near-infrared spectroscopy (NIRS) analyses.

Compatible with:

- Holder OMNIS NIR, flow-through cell (6.070401.100)
- DS2500 holder for flow cells (6.7493.000)



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6.7401.310 Flow-through cell, 1 mm

Flow quartz cuvettes with an optical path length of 1.0 mm suitable for near-infrared spectroscopy (NIRS) analyses.

Compatible with:

- Holder OMNIS NIR, flow-through cell (6.070401.100)
- DS2500 holder for flow cells (6.7493.000)



The flow quartz cuvettes enable continuous monitoring, for example of tablet disintegration processes and reaction kinetics. The high pressure resistance and a special bubble capturing system make all measurements particularly easy.

Windows made of quartz glass of maximum purity and homogeneity ensure a transmission of more than 80% in the wavelength range of 200 nm - 2,500 nm.

A variety of pathlengths are available:

0.5 mm pathlength and a volume = 175  $\mu$ L (order number: 67401300)

1 mm pathlength and a volume = 350  $\mu$ L (order number: 67401310)

2 mm pathlength and a volume = 700  $\mu$ L (order number: 67401320)

5 mm pathlength and a volume = 1,750  $\mu$ L (order number: 67401330)

10 mm pathlength and a volume = 3,500  $\mu$ L (order number: 67401340)

Dimensions h x l x w = 35 mm x 12.5 mm x 12.5 mm

Window height = 8.5 - 15 mm

Compatible with the NIRS spacer for the XDS RapidLiquid Analyzer and the DS2500 holder for the DS2500 Liquid Analyzer.



The flow quartz cuvettes enable continuous monitoring, for example of tablet disintegration processes and reaction kinetics. The high pressure resistance and a special bubble capturing system make all measurements particularly easy.

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A variety of pathlengths are available:

0.5 mm pathlength and a volume = 175  $\mu$ L (order number: 67401300)

1 mm pathlength and a volume = 350  $\mu$ L (order number: 67401310)

2 mm pathlength and a volume = 700  $\mu$ L (order number: 67401320)

5 mm pathlength and a volume = 1,750  $\mu$ L (order number: 67401330)

10 mm pathlength and a volume = 3,500  $\mu$ L (order number: 67401340)

Dimensions h x l x w = 35 mm x 12.5 mm x 12.5 mm

Window height = 15 mm

Compatible with the NIRS spacer for the XDS RapidLiquid Analyzer



6.7401.340

NIRS 12.5 mm quartz cuvette flow 10 mm

The flow quartz cuvettes enable continuous monitoring, for example of tablet disintegration processes and reaction kinetics. The high pressure resistance and a special bubble capturing system make all measurements particularly easy.

Windows made of quartz glass of maximum purity and homogeneity ensure a transmission of more than 80% in the wavelength range of 200 nm - 2,500 nm.

A variety of pathlengths are available:

0.5 mm pathlength and a volume = 175  $\mu$ L (order number: 67401300)

1 mm pathlength and a volume = 350  $\mu$ L (order number: 67401310)

2 mm pathlength and a volume = 700  $\mu$ L (order number: 67401320)

5 mm pathlength and a volume = 1,750  $\mu$ L (order number: 67401330)

10 mm pathlength and a volume = 3,500  $\mu$ L (order number: 67401340)

Dimensions h x l x w = 35 mm x 12.5 mm x 12.5 mm

Window height = 15 mm

Compatible with the NIRS spacer for the XDS RapidLiquid Analyzer



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6.7402.070

Disposable vials, 2 mm diameter, transmission

200 lockable disposable glass vials (borosilicate) with a diameter of 2 mm for analyses of liquids in transmission mode.

Compatible with:

- Holder OMNIS NIR, vial, 2 mm (6.07401.050)
- DS2500 holder for flow cells (6.7492.000)



6.7402.100 Disposable vials, 10 mm diameter, transmission

195 lockable disposable glass vials (borosilicate) with a diameter of 10 mm for analyses of liquids in transmission.

Compatible with:

- Holder OMNIS NIR, vial, 10 mm (6.07401.080)
- DS2500 holder for 4 mm disposable vials (6.7492.030)



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6.7402.240 Disposable vial, 8 mm, transmission, qty. 100

100 disposable glass vials (borosilicate) with an optical path length of 8 mm for analyses of liquids in transmission. The disposable vials are supplied with the associated stoppers (number of pieces = 100).

Compatible with:

- Holder OMNIS NIR, vial, 8 mm (6.07401.070)
- DS2500 holder for 8 mm disposable vials (6.7492.020)



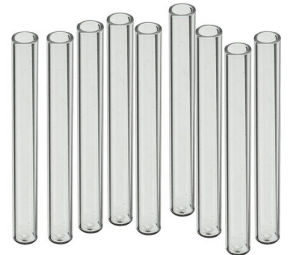
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6.7402.250 Disposable vial, 4 mm, transmission, qty. 200

200 disposable glass vials (borosilicate) with an optical path length of 4 mm for analyses of liquids in transmission.

Compatible with:

- Holder OMNIS NIR, vial, 4 mm (6.07401.060)
- DS2500 holder for 4 mm disposable vials (6.7492.010)



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6.7402.260 Stopper for disposable vial, 4 mm, qty. 100

100 stoppers for 4 mm transmission disposable vials (6.7402.250).



6.7403.000 NIRS XDS spacer for disposable 8 mm vials (6.7402.000)

Spacer for disposable glass vials with 8 mm diameter.



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6.7403.010 NIRS XDS spacer for disposable 4 mm vials (6.7402.010)

Spacer for disposable glass vials with 4 mm diameter



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6.7403.020 XDS spacer for disposable 2 mm vials (6.7402.070)

Spacer for the disposable glass vials with 2 mm diameter.



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6.7403.030 XDS spacer for disposable 10 mm vials (6.7402.100)

Spacer for the disposable glass vials with 10 mm diameter.



6.7403.110 NIRS XDS spacer for 0.5 mm cuvettes (6.7401.110)

Spacer for fixing open quartz cuvettes with 0.5 mm total pathlength in an NIRS XDS RLA Analyzer.



6.7403.180 NIRS Spacer for 12.5 mm cuvettes

The NIRS Spacer for 12.5 mm cuvette set ensures spacers for an optimum position of the cuvette in the sample holder.



6.7430.000 NIRS XDS lab spare lamp

Spare lamp with 12 V and 50 W for the monochromator of the NIRS XDS laboratory instruments



6.7430.010 NIRS XDS lab spare parts kit

NIRS XDS spare parts kit of the lab instrument is comprised of two spare lamps, two fan filters and four fuses.





6.7430.060

Micro Fiber Cleaning Cloth

Cleaning cloth for monitors and optics.



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6.7450.040

NIRS transmission wavelength calibration standard

Transmission wavelength calibration standard for NIRS XDS RLA Analyzer and NIRS XDS Transmission OptiProbe Analyzer



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6.7450.130

Certified wavelength and transmission standards (6-pc. set).

Certified wavelength and transmission standards (0.25 AU, 0.5 AU, 1 AU, 1.5 AU and 2.0 AU) for NIRS XDS RapidLiquid Analyzer and NIRS XDS Transmission OptiProbe Analyzer in regulated environments.

