

Raman Rxn4 analyzer

Robuuste, betrouwbare Raman-analyzer, die proces- en kwaliteitsbewaking 24/7 waarborgt



Meer informatie en actuele prijzen:

www.be.endress.com/KRXN4B

Voordelen:

- Robuust, betrouwbaar en zeer nauwkeurig
- Eenvoudige installatie en minimaal onderhoud/downtime
- 24/7 inline, online of at-line procesmetingen en bewaking
- Dankzij de uniforme interne constructie is een modeloverdracht eenvoudig als ondersteuning van redundante analyzersystemen
- Intuïtieve, volledig geïntegreerde Raman RunTime-besturingssoftware via touchscreen of interface op afstand
- Opschalen, afschalen en compatibel met de cGMP/testinstallatie
- Geschikt voor uitgangen in gevaarlijke / geclassificeerde omgevingen

Overzicht specificaties

- **Laser wavelength** Base model: 532 nm, 785 nm, 1000 nm
Hybrid: 785 nm
- **Spectral coverage** Base Model: 150-4350 cm⁻¹ (532 nm)
150-3425 cm⁻¹ (785 nm) 200-2400 cm⁻¹ (1000 nm) Hybrid:
175-1890 cm⁻¹ (785 nm)

Toepassingsgebied: De Raman Rxn4 analyzer maakt gebruik van Kaiser Raman-technologie en is de optimale keuze voor productie- en procesomgevingen. De Raman Rxn4 levert prestaties met een hoge resolutie voor in situ, realtime metingen en regeling. Deze is zelfcontrolerend, levert diagnose en zelfkalibratie als waarborg voor de validiteit van elke meting. Monteerbaar in een standaard 19"-rek bespaart de Raman Rxn4 kostbare ruimte op de werkvloer. Het instrument is ook leverbaar met een optionele roestvrijstalen NEMA 4X-behuizing.

Kenmerken en specificaties

Liquid

Meetprincipe

Raman spectroscopy

Laser wavelength

Base model: 532 nm, 785 nm, 1000 nm

Hybrid: 785 nm

Spectral coverage

Base Model:

150-4350 cm⁻¹ (532 nm)

150-3425 cm⁻¹ (785 nm)

200-2400 cm⁻¹ (1000 nm)

Hybrid: 175-1890 cm⁻¹ (785 nm)

Spectral resolution

Base model (average):

5 cm⁻¹ (532 nm)

4 cm⁻¹ (785 nm)

5 cm⁻¹ (1000 nm)

Hybrid:

4 cm⁻¹ (785 nm) average

Channels

Base model:

Up to four channels

Hybrid:

Up to two channels

Temperature

Base model:

Operating: 5 to 35 °C (532 nm, 785 nm); 5 to 30 °C (1000 nm)

Storage: -15 to 50 °C

Hybrid:

Operating: 5 to 35 °C

Storage: -15 to 50 °C

Enclosure configuration:

Operating: 5 to 50 °C (all wavelengths)

Storage: -15 to 50 °C

Liquid

Relative humidity

20-80% RH, non-condensing

Input voltage

Base model and Hybrid:
100-240 V, 50-60 Hz, $\pm 10\%$
Enclosure configuration:
115 V $\pm 10\%$, 60 Hz -OR-
230 V $\pm 10\%$, 50/60 Hz

Power consumption (W)

Base model and Hybrid:
400 (max)
250 (typical start-up)
120 (typical running)
Enclosure configuration:
1560 (max)
1560 (typical start-up)
750 (typical running)

Warm up time (minutes)

Base model and Hybrid:
120
Enclosure configuration:
240

Unit dimensions (width x height x depth in mm)

Base model and Hybrid:
483 x 267 x 556
Enclosure configuration:
1175 x 1480 x 826 (with optional trolley)

Weight (kg)

Base model and Hybrid:
28.5
Enclosure configuration:
185.5 (with optional trolley)

Liquid

Sampling probe compatibility

Base model and enclosure configuration:

Raman Rxn-10 (with accessory optics), Rxn-40, Rxn-41, Rxn-45, Rxn-46

Hybrid:

Channel 1 - Raman Rxn-20 (with accessory optics)

Channel 2 - Raman Rxn-10 (with accessory optics), Rxn-40, Rxn-41, Rxn-45, Rxn-46

Automation interface

OPC

Modbus

HTTPS

(contact us for other options)

Installation options

Base model and Hybrid:

19-inch rack package

Enclosure configuration:

NEMA 4X enclosure; wall-mountable, mobile trolley, or fixed stand

Hazardous area certifications

Base model and Hybrid:

ATEX, CSA, IECEx

Enclosure configuration:

Call support for options

Solids

Measurement principle

Raman spectroscopy

Laser wavelength

Base model: 532 nm, 785 nm, 1000 nm

Enclosure configuration: 532 nm, 785 nm, 1000 nm

Hybrid: 785 nm

Solids

Spectral coverage

Base Model and Enclosure configuration:

150-4350 cm⁻¹ (532 nm)

150-3425 cm⁻¹ (785 nm)

200-2400 cm⁻¹ (1000 nm)

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4 cm⁻¹ (785 nm)

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4 cm⁻¹ (785 nm) average

Channels

Base model and Enclosure configuration:

Up to four channels

Hybrid:

Up to two channels

Temperature

Base model:

Operating: 5 to 35 °C (532 nm, 785 nm); 5 to 30 °C (1000 nm)

Storage: -15 to 50 °C

Hybrid:

Operating: 5 to 35 °C

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Enclosure configuration:

Operating: 5 to 50 °C (all wavelengths)

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Solids

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Solids

Sampling probe compatibility

Base model and enclosure configuration:

Raman Rxn-10 (with accessory optics)

Hybrid:

Channel 1 - Raman Rxn-20 (with accessory optics)

Channel 2 - Raman Rxn-10 (with accessory optics)

Automation interface

OPC

Modbus

HTTPS

(contact us for other options)

Installation options

Base model and Hybrid:

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Enclosure configuration:

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Hazardous area certifications

Base model and Hybrid:

ATEX, CSA, IECEx

Enclosure configuration:

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Gases

Measurement principle

Raman spectroscopy

Laser wavelength

Base model: 532 nm

Enclosure configuration: 532 nm

Spectral coverage

Base Model and Enclosure configuration:

150-4350 cm⁻¹ (532 nm)

Gases

Spectral resolution

Base model and Enclosure configuration (average):
5 cm⁻¹ (532 nm)

Channels

Base model and Enclosure configuration:
Up to four channels

Temperature

Base model:
Operating: 5 to 35 °C
Storage: -15 to 50 °C
Enclosure configuration:
Operating: 5 to 50 °C (all wavelengths)
Storage: -15 to 50 °C

Relative humidity

20-80% RH, non-condensing

Input voltage

Base model:
100-240 V, 50-60 Hz, ±10%
Enclosure configuration:
115 V ±10%, 60 Hz -OR-
230 V ±10%, 50/60 Hz

Power consumption (W)

Base model:
400 (max)
250 (typical start-up)
120 (typical running)
Enclosure configuration:
1560 (max)
1560 (typical start-up)
750 (typical running)

Gases

Warm up time (minutes)

Base model:

120

Enclosure configuration:

240

Unit dimensions (width x height x depth in mm)

Base model:

483 x 267 x 556

Enclosure configuration:

1175 x 1480 x 826 (with optional trolley)

Weight (kg)

Base model:

28.5

Enclosure configuration:

185.5 (with optional trolley)

Sampling probe compatibility

Raman Rxn-30

Automation interface

OPC

Modbus

HTTPS

(contact us for other options)

Installation options

Base model and Hybrid:

19-inch rack package

Enclosure configuration:

NEMA 4X enclosure; wall-mountable, mobile trolley, or fixed stand

Gases

Hazardous area certifications

Base model and Hybrid:

ATEX, CSA, IECEX

Enclosure configuration:

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