Raman Rxn2 analyzer

Bridge your application from the laboratory to the process environment

Benefits:
- Reliable real-time, in situ measurements
- Intuitive, embedded control software via touchscreen or remote interface
- Convenience of a single base unit supporting up to four probes
- Sequential operation for fast analysis per channel and programmable channel interrogation
- Converts acquired Raman spectra into process knowledge using built-in multivariate predictors
- Suitable for outputs into hazardous area/classified environments
- Proven model transferability to process development and manufacturing scales

Specs at a glance
- **Spectral coverage**
  - Starter: 300-3300 cm\(^{-1}\) (785 nm) 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)

Field of application: Adeptly harness the power of Raman spectroscopy with the Raman Rxn2 analyzer. Designed for use in analytical laboratories with model transfer capabilities, the Raman Rxn2 is heavily relied on for routine sample identification, support of R&D projects, early process development, and scale-up settings for in situ analysis. Available as a benchtop or on a mobile wheeled cart, the Raman Rxn2 offers location convenience and portability for process development laboratories.

Features and specifications
Liquid

**Measuring principle**
Raman spectroscopy

**Spectral coverage**
- **Starter:**
  - 300-3300 cm$^{-1}$ (785 nm)
- **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**
- **Starter:**
  - 10 cm$^{-1}$ (average)
- **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**
- **Starter:**
  - Single channel
- **Base Model:**
  - Up to four channels
- **Hybrid:**
  - Up to two channels

**Temperature**
- **Operating:**
  - 15 to 30 °C
  - 59 to 86 °F
- **Storage:**
  - -15 to 50 °C
  - 5 to 122 °F
<table>
<thead>
<tr>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relative humidity</strong></td>
</tr>
<tr>
<td>20 to 80 %, non-condensing</td>
</tr>
<tr>
<td><strong>Input voltage</strong></td>
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<tr>
<td>100-240 V, 50-60 Hz, ±10%</td>
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<tr>
<td><strong>Power consumption (W)</strong></td>
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<tr>
<td>400 (max)</td>
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<tr>
<td>250 (typical start-up)</td>
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<tr>
<td>120 (typical running)</td>
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<tr>
<td><strong>Warm up time (minutes)</strong></td>
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<tr>
<td>120</td>
</tr>
<tr>
<td><strong>Unit dimensions (width x height x depth)</strong></td>
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<tr>
<td>Benchtop model:</td>
</tr>
<tr>
<td>279 x 483 x 592 mm</td>
</tr>
<tr>
<td>10.99 x 19.02 x 23.31 inch</td>
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<tr>
<td>Cart model:</td>
</tr>
<tr>
<td>685 x 1022 (to tabletop) x 753 mm</td>
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<tr>
<td>26.97 x 40.24 (to tabletop) x 29.65 inch</td>
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<tr>
<td><strong>Weight</strong></td>
</tr>
<tr>
<td>Base model:</td>
</tr>
<tr>
<td>32 kg / 71 lbs</td>
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<tr>
<td>Cart model:</td>
</tr>
<tr>
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<tr>
<td><strong>Sampling probe compatibility</strong></td>
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<tr>
<td>Starter:</td>
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<tr>
<td>Raman Rxn-10 (with accessory optics)</td>
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<tr>
<td>Base model:</td>
</tr>
<tr>
<td>Raman Rxn-10 (with accessory optics), Rxn-40, Rxn-41, Rxn-45, Rxn-46</td>
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<td>Hybrid:</td>
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<tr>
<td>Channel 1 - Raman Rxn-20 (with accessory optics)</td>
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<tr>
<td>Channel 2 - Raman Rxn-10 (with accessory optics), Rxn-40, Rxn-41, Rxn-45, Rxn-46</td>
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Liquid

**Automation interface**
OPC
Modbus
HTTPS
(contact us for other options)

**Installation options**
Benchtop (standard) or mobile wheeled cart

**Hazardous area certifications**
ATEX, CSA, IECEx

Solids

**Measuring principle**
Raman spectroscopy

**Spectral coverage**
Starter:
300-3300 cm\(^{-1}\) (785 nm)
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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)

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Starter:
10 cm\(^{-1}\) (average)
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Solids

**Channels**
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- **Hybrid:** Up to two channels

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- **Storage:**
  - -15 to 50 °C
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**Relative humidity**
- 20 to 80 %, non-condensing

**Input voltage**
- 100-240 V, 50-60 Hz, ±10%

**Power consumption (W)**
- 400 (max)
- 250 (typical start-up)
- 120 (typical running)

**Warm up time (minutes)**
- 120

**Unit dimensions (width x height x depth)**
- **Benchtop model:**
  - 279 x 483 x 592 mm
  - 10.99 x 19.02 x 23.31 inch
- **Cart model:**
  - 685 x 1022 (to tabletop) x 753 mm
  - 26.97 x 40.24 (to tabletop) x 29.65 inch
Solids

**Weight**
Base model: 32 kg / 71 lbs
Cart model: 93 kg / 205 lbs

**Sampling probe compatibility**
Starter:
Raman Rxn-10 (with accessory optics)
Base model:
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**
Benchtop (standard) or mobile wheeled cart

**Hazardous area certifications**
ATEX, CSA, IECEx

Gases

**Measuring principle**
Raman spectroscopy

**Spectral coverage**
150-4350 cm\(^{-1}\) (532 nm)

**Spectral resolution**
5 cm\(^{-1}\) (532 nm)
### Gases

**Channels**
Up to four channels

**Temperature**
**Operating:**
15 to 30 °C  
59 to 86 °F

**Storage:**
-15 to 50 °C  
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**Relative humidity**
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**Input voltage**
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**Weight**
**Base model:**
- 32 kg / 71 lbs

**Cart model:**
- 93 kg / 205 lbs
Gases

**Sampling probe compatibility**
- Raman Rxn-10 with accessory optics
- Raman Rxn-40
- Raman Rxn-41

**Automation interface**
- OPC
- Modbus
- HTTPS
  (contact us for other options)

**Installation options**
- Benchtop (standard) or mobile wheeled cart

**Hazardous area certifications**
- ATEX, CSA, IECEx