

VERITY® 1741 UV-VIS Detector

Designed For Semi-Preparative To Preparative HPLC Modular Systems



SPEC SHEET | PURIFICATION

VERITY® 1741 UV-VIS DETECTOR

With the ability to scan multiple different wavelengths simultaneously, the VERITY® 1741 UV-VIS Detector provides more significant detection information required for a wide array of purification applications.

DESIGNED FOR SEMI-PREPARATIVE AND PREPARATIVE HPLC

The reliable and versatile VERITY 1741 Detector has a large scanning range of 200–800 nm and offers flow cell pathlengths ranging from 0.05 to 5 mm with a compatible flow rate of up to 700 mL/min.

EASY-TO-USE AT A LOW COST OF OWNERSHIP

Features a large display for stand-alone operation and offers a built-in counter for monitoring lamp life, helping you avoid purification interruptions. The easy-to-replace flow cells and long-life lamp decrease the detector's downtime, saving you money.

FULLY INTEGRATED WITH TRILUTION® LC SOFTWARE

TRILUTION® LC Software for purification fully controls the detector to monitor up to eight different wavelengths to trigger fraction collection and display real-time spectra. The VERITY 1741 Detector is a powerful addition to our VERITY® preparative HPLC systems that allows safe compound purification.

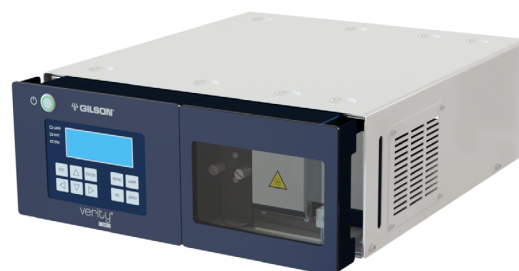


Figure 1

VERITY® 1741 UV-VIS Detector



Figure 2

VERITY® 1741 UV-VIS Detector and
VERITY® 3240 High Pressure Binary Gradient Pump

VERIFIABLE SCIENTIFIC RESULTS REQUIRE RELIABLE PURIFICATION SYSTEMS

Get the accuracy and precision you need for trusted results with VERITY® purification systems. Whether you isolate large or small molecules or need milligram to kilogram purifications, our VERITY systems offer you a wide array of components to build the perfect system to meet your specific needs. All systems are easily controlled by intuitive software, letting you focus on science. Backed by our long history in chromatography, you are reassured that VERITY solutions are built to last and will make your life in the lab easier.

TECHNICAL SPECIFICATIONS

| Specification | Definition or Value | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|--|--|-------------|-----------------|-------------------|-------------------|------------------------------|--------------------|----------|--------|-------|------------|-------|------------------------------|----------|--------|-------|------------|-------|------------------------------|----------|---------|-------|------------|-------|------------------------------|----------|--------|-------|------------|-------|------------------------------|----------|------|--------|------------|-------|------------------------------|----------|--------|-------|------------|------|-----------------|----------|--------|-------|------------|------|-----------------|----------|---------|-------|------------|------|-----------------|----------|--------|-------|------------|------|-----------------|
| Wavelength Range | 200-800 nm (256 CCD elements) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wavelength Accuracy | ±1 nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Wavelength Reproducibility | ±0.5 nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flow Cells | <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="background-color: #0056b3; color: white;">Part Number</th> <th style="background-color: #0056b3; color: white;">Pathlength</th> <th style="background-color: #0056b3; color: white;">Internal Volume</th> <th style="background-color: #0056b3; color: white;">Maximum Flow Rate</th> <th style="background-color: #0056b3; color: white;">Connecting Thread</th> <th style="background-color: #0056b3; color: white;">Internal Flow Rate</th> </tr> </thead> <tbody> <tr> <td>14161011</td> <td>1.3 mm</td> <td>56 µL</td> <td>200 mL/min</td> <td>10-32</td> <td>1/16" stainless steel tubing</td> </tr> <tr> <td>14161012</td> <td>0.1 mm</td> <td>35 µL</td> <td>200 mL/min</td> <td>10-32</td> <td>1/16" stainless steel tubing</td> </tr> <tr> <td>14161013</td> <td>0.05 mm</td> <td>35 µL</td> <td>200 mL/min</td> <td>10-32</td> <td>1/16" stainless steel tubing</td> </tr> <tr> <td>14161014</td> <td>0.5 mm</td> <td>40 µL</td> <td>200 mL/min</td> <td>10-32</td> <td>1/16" stainless steel tubing</td> </tr> <tr> <td>14161019</td> <td>5 mm</td> <td>100 µL</td> <td>200 mL/min</td> <td>10-32</td> <td>1/16" stainless steel tubing</td> </tr> <tr> <td>14161015</td> <td>1.3 mm</td> <td>60 µL</td> <td>700 mL/min</td> <td>¼-28</td> <td>1/8" FEP tubing</td> </tr> <tr> <td>14161016</td> <td>0.1 mm</td> <td>40 µL</td> <td>700 mL/min</td> <td>¼-28</td> <td>1/8" FEP tubing</td> </tr> <tr> <td>14161017</td> <td>0.05 mm</td> <td>40 µL</td> <td>700 mL/min</td> <td>¼-28</td> <td>1/8" FEP tubing</td> </tr> <tr> <td>14161018</td> <td>0.5 mm</td> <td>45 µL</td> <td>700 mL/min</td> <td>¼-28</td> <td>1/8" FEP tubing</td> </tr> </tbody> </table> | Part Number | Pathlength | Internal Volume | Maximum Flow Rate | Connecting Thread | Internal Flow Rate | 14161011 | 1.3 mm | 56 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | 14161012 | 0.1 mm | 35 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | 14161013 | 0.05 mm | 35 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | 14161014 | 0.5 mm | 40 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | 14161019 | 5 mm | 100 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | 14161015 | 1.3 mm | 60 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing | 14161016 | 0.1 mm | 40 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing | 14161017 | 0.05 mm | 40 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing | 14161018 | 0.5 mm | 45 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing |
| | Part Number | Pathlength | Internal Volume | Maximum Flow Rate | Connecting Thread | Internal Flow Rate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161011 | 1.3 mm | 56 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161012 | 0.1 mm | 35 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161013 | 0.05 mm | 35 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161014 | 0.5 mm | 40 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161019 | 5 mm | 100 µL | 200 mL/min | 10-32 | 1/16" stainless steel tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161015 | 1.3 mm | 60 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161016 | 0.1 mm | 40 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14161017 | 0.05 mm | 40 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14161018 | 0.5 mm | 45 µL | 700 mL/min | ¼-28 | 1/8" FEP tubing | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| The maximum pressure for all flow cells is 6 MPa (870 psi, 60 bar) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Digital Output | 1 V/AU | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Output Signal | Four wavelengths (channels) or scan with speed up to 20 Hz with step of 1 nm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Power Requirements | Voltage: 100-240 VAC Frequency: 50/60 Hz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Environmental Conditions | Indoor use only Altitude: up to 2000 m Temperature: 5°C-40°C Humidity: maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C Voltage fluctuations: up to ±10% of nominal voltage Overvoltage category I Pollution degree: 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Safety and Compliance | The detector has been certified to safety standards specified for Canada, Europe, and the United States. Refer to the instrument rear panel label and the Declaration of Conformity document for the current standards to which the instrument has been tested. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dimensions (W x H x D) | 37.0 x 14.9 x 45.5 cm (14.6 x 5.9 x 17.9 in.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Weight | 8.7 kg (19.2 lb.) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |