



The PDA is a high-resolution, 1024-element photodiode array detector. The PDA simultaneously provides 1-nm resolution with the noise and drift performance previously available only in monochromator-based detectors. It operates using Chromeleon® software, which provides detector control, spectral overlays, and 3-D plotting. The high resolution and low noise performance of the PDA also make it ideal for the most sensitive and accurate library searches and peak purity analyses.

Now sold under the
Thermo Scientific brand

Thermo
SCIENTIFIC

Performance Features

- Extremely accurate compound confirmation with 1024 element, 1-nm resolution, photodiode array.
- Flexibility in both UV and Vis applications with 190–800 nm wavelength range.
- Low noise and high light intensity over the full spectral range using deuterium and tungsten lamps.
- Fast and accurate wavelength verification using built-in holmium oxide filter.
- Excellent reliability and reproducibility with low baseline drift (< 500 μ AU/h).
- Simplified routine maintenance through front access to prealigned cells and lamps.
- Full control and flexible data collection through Chromeleon software (version 6.6 or higher).
- Easily monitor detector status for maximum uptime through five front-panel LEDs.
- Supports alternate programmable data collection with four analog outputs.



Passion. Power. Productivity.

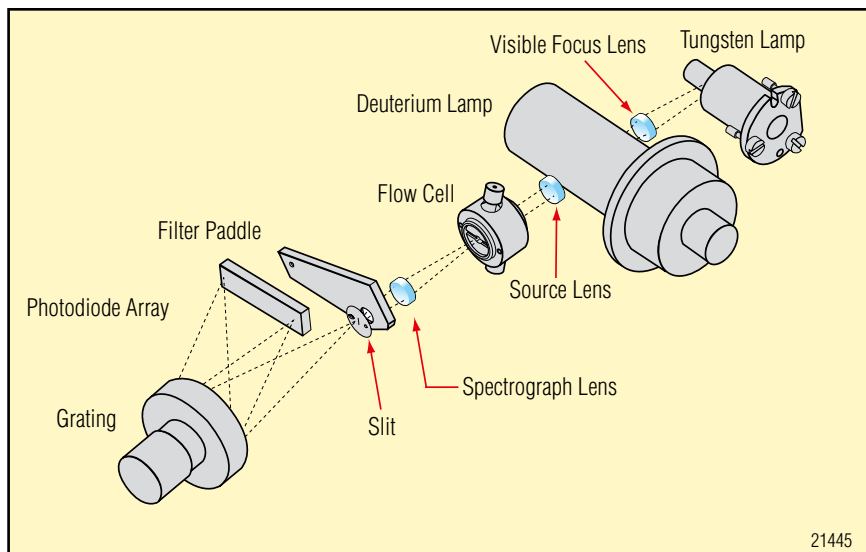


Figure 1. Light from the tungsten lamp is focused through an aperture in the deuterium lamp. The combined light then passes through the flow cell to the filter paddle, through the focusing lens, to the slit, and then to the diffraction grating and PDA.

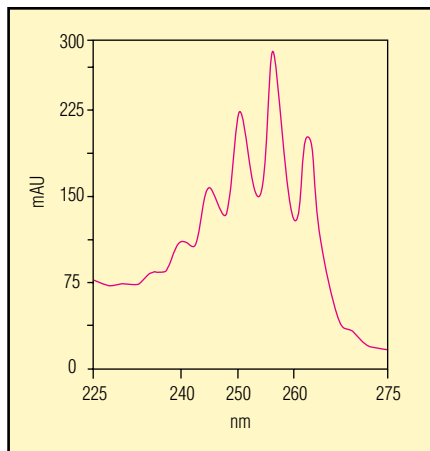


Figure 2. The eight fingers of the benzene spectrum demonstrate the excellent spectral resolution achieved with the 1024-element photodiode array and quality optics bench.

ORDERING INFORMATION

To order, using the following part number, contact your local Dionex office or distributor nearest you. In the U.S., call (800) 346-6390. In other regions, refer to the phone numbers below.

PDA Photodiode Array Detector

PDA P/N 064447

FLOW CELL OPTIONS

Cell	Material	Path Length	Cell Volume	P/N
Standard	PEEK	10 mm	13 μ L	056346
Standard	SST	10 mm	13 μ L	056126
Semi-micro	PEEK	9 mm	3.1 μ L	064169
Semi-micro	SST	9 mm	3.1 μ L	064168
Semi-preparative	PEEK	0.4 mm	0.7 μ L	064167

SPECIFICATIONS

Performance

Noise: $\pm 10 \mu\text{AU}$ (flowing water, 2-s rise time, 254 nm)
 $\pm 15 \mu\text{AU}</math> (flowing water, 2-s rise time, 520 nm),$

Drift: <math>< 500 \mu\text{AU/h}</math>

Wavelength Accuracy:

$\pm 1 \text{ nm}$, self-calibration with D2 lines, verification with built-in holmium oxide filter

Resolution: 1 nm

Linearity:

Less than 5% RSD up to 2.0 AU
 Less than 2% RSD up to 1.5 AU

Optics

Photodiode Array: 1024 element

Pixel Resolution: 0.7 nm

Lamps: Tungsten and deuterium

Electronics

Analog Outputs:

Four, 0–3 AU, independently selectable, 1000 mV range

Physical Specifications

Power Requirements:

90–265 V ac, 47–63 Hz (autosensing, no adjustment needed)

Operating Temperature Range:

4–40 $^{\circ}\text{C}$ (40–104 $^{\circ}\text{F}$)
 constant temperature

Operating Humidity Range:

5–95% relative, noncondensing

Dimensions (h \times w \times d):

17.4 \times 44.4 \times 50.3 cm
 6.8 \times 17.5 \times 19.8 in.

Weight: 18.1 kg

40 lbs

Chromleon is a registered trademark of Dionex Corporation.

Printed on recycled and recyclable paper.

Passion. Power. Productivity.



Dionex Corporation

1228 Titan Way
 P.O. Box 3603
 Sunnyvale, CA
 94088-3603
 (408) 737-0700

North America

U.S. (847) 295-7500
 Canada (905) 844-9650

South America

Brazil (55) 11 3731 5140

Europe

Austria (43) 1 616 51 25 Belgium (32) 3 353 4294 Denmark (45) 36 36 90 90
 France (33) 1 39 30 01 10 Germany (49) 6126 991 0 Italy (39) 02 51 62 1267
 The Netherlands (31) 20 683 9768 Switzerland (41) 62 205 9966
 U.K. and Ireland (44) 1276 691722

Asia Pacific

Australia (61) 2 9420 5233 China (852) 2428 3282 India (91) 22 28475235
 Japan (81) 6 6885 1213 Korea (82) 2 2653 2580 Singapore (65) 6289 1190

www.dionex.com



LPN 1169-07 PDF 10/06
 © 2006 Dionex Corporation