

AD25 Absorbance Detector



The Dionex AD25 is a dual beam, variable wavelength absorbance detector for Dionex Ion and Liquid Chromatography Systems. Broad spectral capability is provided by two light sources: a deuterium lamp for ultraviolet wavelengths, and a tungsten lamp for visible detection. Validation of wavelength accuracy is accomplished efficiently using a built-in holmium oxide filter test. The AD25 can be operated at the front panel or automated with Dionex chromatography software.

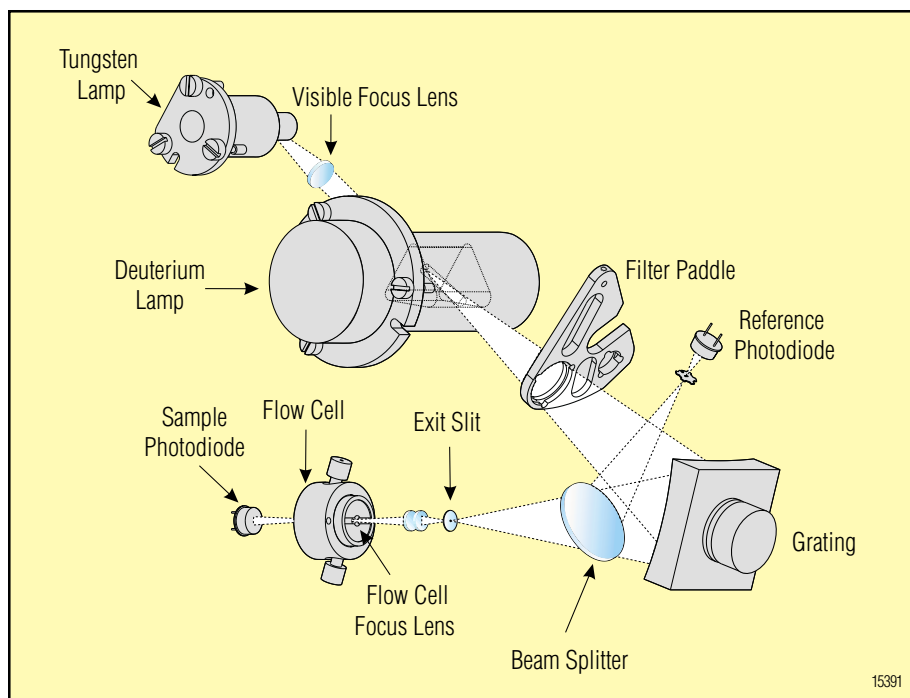
Now sold under the
Thermo Scientific brand

Thermo
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Performance Features

- Deuterium and tungsten lamps provide operation over the entire wavelength range of 190–800 nm.
- Compact design for optimal plumbing of liquid flow path and minimal use of bench space.
- Built-in holmium oxide filter for automated wavelength verification.
- High signal-to-noise ratio for maximum sensitivity.
- Low baseline drift for reliable results.
- Excellent resolution yields high linearity.
- Integrated flow cell heat exchanger for thermal stability.
- Lamp lifetime monitor prevents downtime.
- Front access to pre-aligned lamps and flow cell to simplify detector maintenance.
- Available with 10-mm PEEK and SST flow cells for compatibility with a wide range of IC and HPLC applications.





The image of the tungsten lamp is focused through the aperture of the deuterium lamp. The combined light then passes through the filter paddle to the diffraction grating. The selected wavelength is partially reflected to the reference photodiode. The remaining light passes through the focus lens and flow cell to the sample photodiode where sample absorbance is measured.

AD25 OPTICS, ELECTRONICS, AND FLOW CELL SPECIFICATIONS

AD25 Optics

Optical System: Forward, dual-beam monochromator with a concave holographic grating and reflective beamsplitter.

Light Source: deuterium lamp (30 W) for UV range and tungsten lamp (10 W) for visible range.

Wavelength Range: 190–800 nm in 1 nm increments.

AD25 Electronics

Analog Output Ranges: 0.001–3.0 AU

Rise Time: 0.1–10 s

Full-scale recorder output: 1 V

Acquisition Ranging: Full dynamic digital absorbance signal monitoring with CHROMELEON™ or PeakNet™ software.
Control Modes: Local through relay closures or TTL. Remote control through CHROMELEON 6.0 or higher or PeakNet™ 5.11 or higher software.

AD25 Flow Cell

Cell: PEEK or SST, fused silica

Cell Path Length: 10 mm

Heat Exchanger Volume: 14.5 µL

Cell Volume: 10 µL PEEK, 13 µL SST

Maximum Flow Cell Operating

Pressure: 300 psi, PEEK

500 psi, SST

PERFORMANCE SPECIFICATIONS

Wavelength Accuracy: ± 1 nm

Bandwidth: < 5 nm

Linearity: > 2 AU

Noise: ± 10.0 µAU peak-to-peak (254 nm, 2 s rise time, flowing water)

Drift: < 100 µAU/h

AD25 PHYSICAL SPECIFICATIONS

Power Requirements:

90–265 V ac, 47–63 Hz

(power supply is autosensing, no voltage adjustment required).

Operating Temperature Range: 4–40 °C

(40–104 °F); cold room (4 °C) compatible as long as system power remains on.

Operating Humidity Range:

5–95% relative, noncondensing

Dimensions (h x w x d):

17 x 22.5 x 42 cm (6.6 x 8.8 x 16.4 in)

Weight: 10.9 kg (24 lb.)

Ordering Information

In the U.S., call (800) 346-6390, or contact the Dionex Regional Office nearest you. Outside the U.S., order through your local Dionex office or distributor. Refer to the following part numbers.

Part Numbers

AD25 with PEEK flow cell 054106

AD25 with SST flow cell 056485



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Printed on recycled and recyclable paper with soy-based ink.

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* Designed, developed, and manufactured under an NSAI registered ISO 9001 Quality System.

<http://www.dionex.com>



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