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ECOM
HPLC FROM PRAGUE

# *TOPAZ*
# Dual UV Detector

P/N 73E000000


is a new type of UV detector, which allows measuring absorbance of **two wavelengths simultaneously in one cell**. This unit is used in liquid chromatography **to verify analyzed samples** by means of a second wavelength or in situations when some **peaks absorb on different wavelengths**. It is possible to use the detector in **analytical, preparative or flash** applications by using different cells. Noise level at 254 nm is **± 1 x $10^{-4}$** AU with an empty cell.

The unit's DAD (diode array detector) design offers many advantages:

- the **wavelength setting** can be changed from **200 up to 320 nm** in increments **of 1nm**
- the unit is easy to operate, **reference and sample signal** are available for detector diagnostics
- **output signal** is available in both digital and analogue form on the output connector
- lamp **work hours** are counted using the built-in counter
- the detector **cell is easy to replace** from the side of the detector
- it is possible to **control the unit using the keypad, external logic signals or an RS232 interface**

## Specification

| | |
|---|---|
| Wavelength range | 200 - 320 nm |
| Spectral half-width | 8 nm |
| Accuracy of adjustment | ± 1 nm |
| Reproducibility | ± 0.5 nm |
| Light source | Deuterium discharge lamp IST WL 24 198 |
| Noise level at empty cell (240 nm, TC 1 s) | ± 1 x $10^{-4}$ AU |
| Drift at empty cell (240 nm after 1 h) | 5 x $10^{-4}$ AU/hr |
| Materials in contact with mobile phase | PTFE; fused silica, stainless steel, Vespel, PEEK |
| Time constant | 1 s |
| Output for integrator | 1 V/AU |
| Interface | RS 232 |
| Power supply | 230 V ± 10%, 50 Hz , 115/100 V± 10%, 50-60 Hz |
| Power input | 75 VA |
| Dimensions (W x H x D) | 220 x 170 x 450 mm |
| Weight | 12 kg |

**Important notice**: Output signal of the detector is directly proportional to the optical path of the cell. Since the optical paths of cells may be changed, noise and drift levels are referred to the optical path of 10 mm, corresponding to the AU definition.

### Cells supplied with the unit:

**Preparative cell PLCC 14 (with the unit)**

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|---|---|
| volume/optical path (adjustable) | 45 µl / 0.1 mm<br>55 µl / 1.4 mm<br>70 µl / 2.4 mm |
| Cell connecting | tubing with OD = 1/8" or 1/16", thread 1/4"-28 |

**Analytical cell HPLC 08 (optionally)**

| | |
|---|---|
| Volume / optical path | 10 µl / 5 mm |
| Diameters of capillaries OD x ID | input 1/16" x 0.2 mm; output 1/16" x 0.5 mm |