# ECDA2800

UV-VIS PDA DETECTOR

Is an analytical **Diode Array Detector** which allows measuring absorbance of eight **wavelengths simultaneously in one cell** just as measuring of whole spectrum (scan). This unit is used in liquid chromatography **to verify analyzed samples** by means of eight wavelengths or scanned spectra.

Noise level at 254 nm is **±5·10⁻⁶** AU with a test cell. High standard **deuterium lamp** in a special socket enables **easy exchange** from front panel.

Output signal is available in both **digital and analogue** form. Detector could be controlled by **Clarity** or **ECOMAC** software.
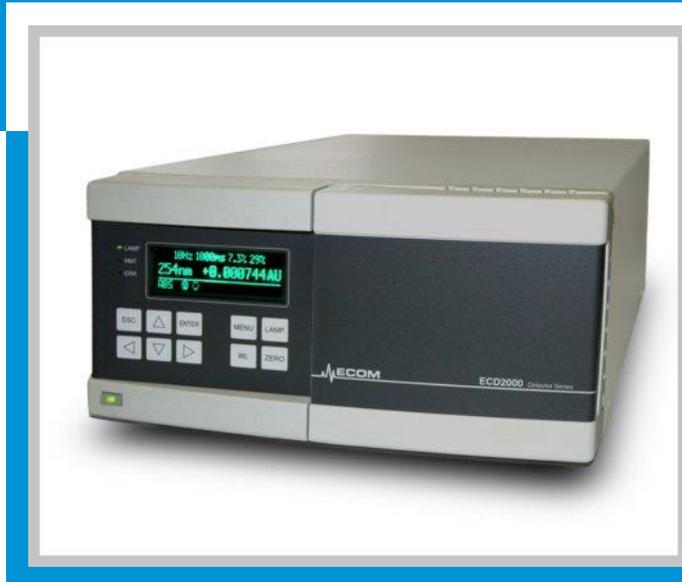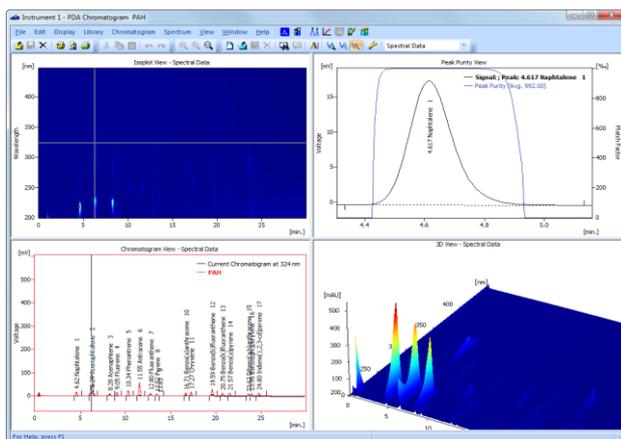
Cell could be easily removed from the front of the unit. Three selectable flow cells **AD02, AD05** and **AD10** with optical path length 2.4, 5 and 10 mm. AD05 cell is included as component of the detector. Other cells on request.

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

- **continuous up to 100 Hz scan** or absorbance measuring **on eight wavelengths simultaneously**
- wavelength setting **from 200 up to 800 nm** in increments of 1nm
- lamp work hours are counted **using the built-in counter for both deuterium and halogen lamps**
- **the cell is easy to replace** from side of the detector
- **Clarity PDA module support for 3D measurement**
- unit is controlled by RS232, Ethernet or USB interface

SPECIFICATION

Wavelength range	200-800 nm
Spectral half-width	10 nm
Number of CCD elements	512 mathematically enhanced to **4 096** by sophisticated algorithm
Accuracy of adjustment	± 1 nm
Reproducibility	± 0.5 nm
Light source	Deuterium discharge lamp, halogen lamp
Noise (Test cell, 254nm, TC 2s, 10 Hz)	± 5·10⁻⁶ AU
Drift (Test cell, 254nm)	1·10⁻⁴ AU/hr.
Time constant	10 – 10 000 ms
Sampling speed	up to 100 Hz
Digital output	1 V/AU
Analog output	4x configurable
Wetted materials	fused silica, stainless steel, PEEK
Communication	RS232, Ethernet(LAN), USB
Display, keypad	VFD 140x32 pixels, 10 pushbuttons
Power supply	100-240V 50/60Hz 110VA
Dimensions (w x h x d)	280 x 135 x 498 mm (11.0"x 5.3" x 19.6")
Weight	9 kg