

# TOY20DAD 800 V

## SCANNING UV-VIS DETECTOR

is an UV (UV-VIS) diode array detector, which allows measuring absorbance of **four wavelengths simultaneously** in one cell just as measuring of **whole spectrum (scan)**. More wavelengths are used in liquid chromatography **to verify purity of analyzed samples** or in situations when some substances absorb on different wavelengths. It is possible to use the detector in **flash and preparative** applications.

It is possible to control the detector **manually by keyboard and display** but also using **RS232, USB** or **LAN**. On the rear panel are available **four analog outputs** and connector for **I/O logical input and output** signals.

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

- absorbance measuring **on four wavelengths simultaneously**
- wavelength setting in increments of 1nm
- **on line scan of whole spectrum with speed up to 20 Hz which allows to create 3D picture**



- lamp work hours are counted **using the built-in counter** for both deuterium and halogen lamps
- **the cell is easy to replace** from the side of the detector
- powering by 100-240 V AC
- unit can be controlled by **RS232, USB, LAN** or keyboard
- **signals are available in analog and digital form**
- **easy service and diagnostic** using display and keyboard or by service SW

### SPECIFICATION

|   | TOY20DAD800 V Scanning  |
|---|---|
| Part number                                 | <b>T20V033X</b>   |
| Wavelength range                            | 190 - 800 nm (256 elements on CCD)                              |
| Number of channels (Signals)                | 4   |
| Scan  | 190 – 800 nm, 20 Hz, step 1 nm                                  |
| Typical spectral half-width                 | 10 nm   |
| Accuracy of an adjustment / Reproducibility | ± 1 nm / ± 0.5 nm   |
| Noise level at test cell (254 nm, TC 1s)    | ± 5 × 10 <sup>-5</sup> AU                                       |
| Drift at test cell (254 nm after 1 h)       | 1 × 10 <sup>-3</sup> AU/hr.                                     |
| Materials in contact with mobile phase      | FEP, fused silica, stainless steel, PEEK                        |
| Time constant                               | 0.5 s, 0.75 s, 1.0 s, 2.0 s, 4.0 s, 8.0 s, 16.0 s, 0.2 s, 0.1 s |
| Light source                                | D2+Halogen lamp   |
| Ranges of four adjustable 1V analog outputs | 5; 2; 1; 0.5; 0.2; 0.1 AU/V                                     |
| Digital output                              | 1 V/AU  |
| Interface                                   | RS232, LAN, USB, Analog output 4x                               |
| Power supply                                | 100-240 V AC  |
| Power input                                 | 100 VA  |
| Dimensions (W x H x D)                      | 135 x 170 x 340 mm (5.32 x 6.69 x 13.39 in)                     |
| Weight                                      | 4.4 kg (9.7 lb)   |

#### PREPARATIVE CELL PLCC 15 (SUPPLIED WITH UNIT)

|                                    |  |
|------------------------------------|--|
| Volume / optical path (adjustable) | 45 µl / 0.3 mm; 55 µl / 1.4 mm; 70 µl / 2.4 mm |
| Flow-cell connecting               | tubing with OD = 1/8", thread 1/4"-28          |
| Maximal flow rate                  | 500 ml/min. (3 000 ml/min. with PLCC 3L)       |