TOY20DAD 800 VEX

SCANNING UV-VIS DETECTOR

is an UV (UV-VIS) diode array detector, which allows measuring absorbance of **four wavelengths simultaneously** in **external cell connected by optical cables**, 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 by 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
- **SMA connectors at front panel allows easy connection of external cell**
- 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 VEX Scanning
Part number	**T20VE33X**
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 1m cables (254 nm, TC 1s)	$\pm\ 8 \times 10^{-5}$ AU
Drift at test cell 1m cables (254 nm after 1 h)	5×10^{-3} 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
Optical connectors	SMA 905
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	3.8 kg (8.4 lb)

EXTERNAL CELL AND OPTICAL CABLES ARE NOT PART OF THESE UNITS. THEY SHALL TO BE ORDERED SEPARATELY.