

MODEL UV6 - UV254 ANALYZER

Compact online analyzer for the automatic measurement of Organic Load Including correlated equivalent for COD, BOD & TOC

APPLICATION FIELDS

- Drinking water
- Municipal waste water
- Industrial waste water
- Rivers and surface water
- Power plants
- Dissolved organic substances in water - THM (trihalomethanes) precursor alert
- Rain overflow basin



ADVANTAGES / FEATURES

Dual compartment enclosure

To ensure complete separation between the electronics and the wet part.

Low operating cost – no reagents

The UV spectroscopy measuring principle requires no chemical reagent resulting in very low operating and maintenance costs.

Xenon lamp – UV light source

The high stability and long operating life make them ideal as light sources for water quality analyzers.

Factory tested, ready for installation and operation

Just connect the power, sample and the analyzer is fully operational.

Automatic calibration / zeroing / cleaning

These automatic functions ensure optimum performance with the minimum of manual intervention.

Free selectable cleaning, zeroing and calibration intervals.

Wide measuring range

The determination ranges of the UV6 Analyzer vary from 0.05 to thousands mg/L (correlated KHP equivalent COD, BOD, TOC) using internal dilution module.

Two parameters version

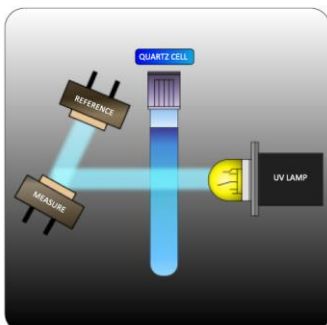
Two parameters – one analyzer. For example, BOD and COD

Color touchscreen user interface

The UV6 is equipped with a graphic touchscreen interface showing measured values and status information. Easy access to menus and functions. Multiple languages. Integrated datalogger with USB download.

Dual streams version

Dual streams version gives two measurements in one instrument, each stream can be either high range or low range with different correlation factors (e.g. Inlet and Outlet of a WWTP).

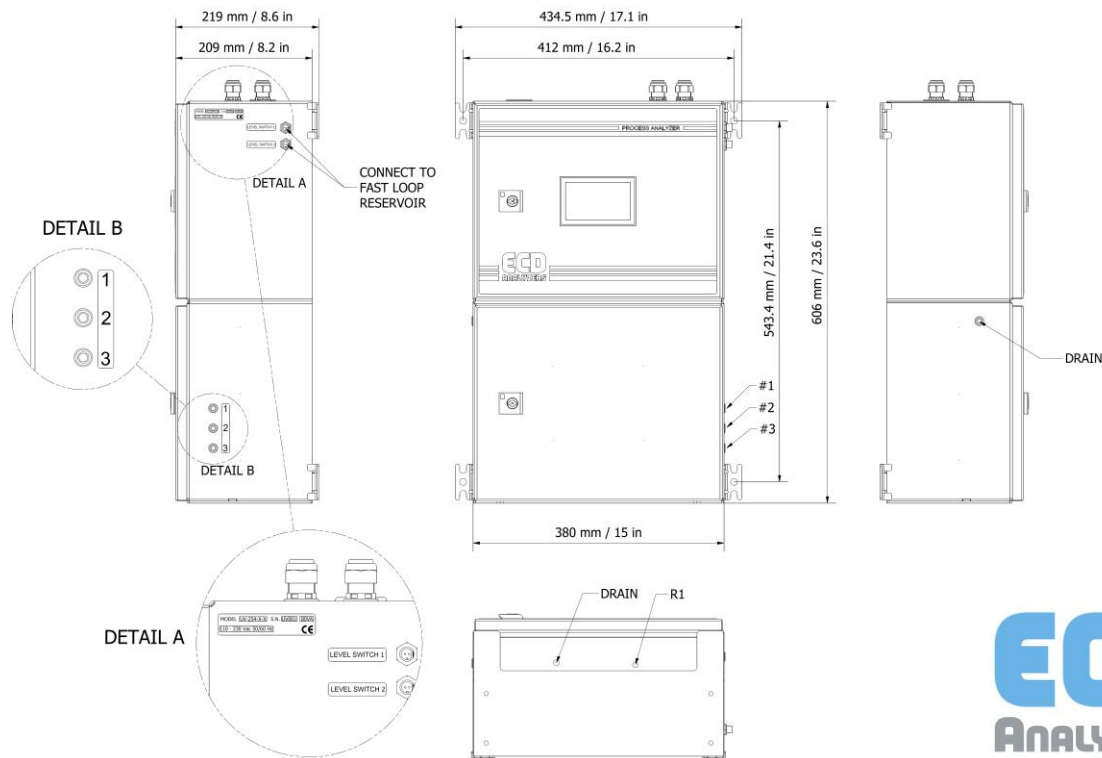


MEASUREMENT PRINCIPLE

Many dissolved organic substances have spectral characteristics capable of absorbing UV light at the wavelength of 254 nm. The xenon lamp produces a UV light radiation that pass through the sample water in a quartz measuring cell. The receiver analyzes the light pulses at two different wavelengths, the measurement wavelength (254 nm) and the reference wavelength (590 nm), at which the light is not influenced by the presence of organic compounds.

TECHNICAL SPECIFICATIONS

Measured parameter:	CODEq, DOCuv, TOCeQ, BODEq, Abs254, SAC254, CODuv, TOCuv, BODuv, SAK254 (mg/l, cm ⁻¹ , m ⁻¹ , AU, mA.U.).	Analysis frequency:	Freely programmable, batch near-continuous analysis.
Measuring principle:	UV254 absorption measurement	Cycle time:	Around 1 minute, including conditioning before analysis cycle and rinsing after measuring.
Measuring range:	22 mm cell:	6 mm cell:	N° of streams:
	0.01 – 50 m ⁻¹ SAC Correlated range (based on KHP): CODEq 0.15-100 mg/L TOCeQ 0.06-40 mg/L BODEq 0.05-30 mg/L	0.1-250 m ⁻¹ SAC Correlated range (based on KHP): CODEq 0.75-370 mg/L TOCeQ 0.3-150 mg/L BOD eq 0.25-120 mg/L	1, 2 with integrated switching valve Pressure-free from overflow vessel Temperature: 41 - 122 °F (5 to 50 °C) Flow Rate: 80 to 500 mL/min Connection: 6 mm (¼-in.)
The possible measuring correlated ranges for sum parameters such as COD, BOD, TOC, would depend to a large extent on the matrix characteristics.			Sample:
Typical COD measuring ranges:	12 mm cell:	2 mm cell:	Drain:
	0.05-100 m ⁻¹ SAC Correlated range (based on KHP): CODEq 0.5-200 mg/L TOCeQ 0.2-80 mg/L BODEq 0.2-65 mg/L	1.5-700 m ⁻¹ SAC Correlated range (based on KHP): CODEq 2.5-1000 mg/L TOCeQ 1-410 mg/L BOD eq 0.8-300 mg/L	Pressure-free, atmospheric drain Connection: 12 mm (½-in.)
WWTP inlet – municipal water: 0 to 4000 mg/L WWTP inlet – industrial water: 0 to 10000 mg/L WWTP outlet - municipal water: 0 to 200 mg/L WWTP outlet - industrial water: 0 to 500 mg/L			Dimensions (H x W x D):
			23.6 x 15.0 x 8.2 in / 606 x 380 x 209 mm
			Weight:
			Approx. 44 lbs (20 Kg)
			Power supply:
			Voltage: 100 - 240 VAC 50/60 Hz standard or 24 VDC (option) Power consumption: max. 80 VA
			Outputs:
			2 x 4-20 mA outputs for measured data Modbus RTU RS485
			Alarms:
			4 SPDT programmable potential free relays, N.O. Or N.C.
			Digital input:
			Remote start / stop
			Operating Temperature:
			41 - 113 °F (5 - 45 °C)
			Humidity:
			10 to 90% non-condensing (indoor use, outdoor installation only possible with protective cabinet or shelter not included)
			Installation:
			Wall mount (standard), bench top support or panel mount (options).
			Ingress Protection:
			IP54
Reproducibility:	All derivated higher range using internal dilution (up to 40 times dilution). SAC 0.5 % of end of measuring range (for homogeneous media) Correlated range (based on KHP): 22 mm cell: ±0.15 mg/L C; 12 mm cell: ±0.5 mg/L C; 6 mm cell: ±0.75 mg/L C; 2 mm cell: ±2.5 mg/L C		



ECD
ANALYZERS