MODEL CA6 - CHROMIUM ANALYZER

Compact online colorimeter for the automatic measurement of Hexavalent Chromium in water

APPLICATION FIELDS

- Drinking water
- Industrial wastewater, discharge limit monitoring or process optimization
- Surface water

ADVANTAGES / FEATURES

Dual compartment enclosure
To ensure complete separation between the electronics and the wet part.

Low reagent consumption
Minimum operating cost by small reagent consumption, only 0.7L (0.18 US.gal) for the 16 mm cell / 1L (0.26 US.gal) for the 26 mm cell of each reagent every 30 days with 15 minute analysis frequency.

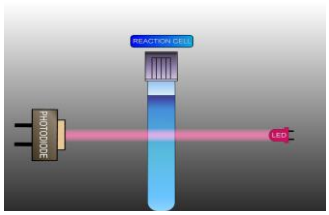
Automatic calibration / validation / cleaning
Validation, cleaning and calibration are standard features which significantly reduce downtime and operator intervention ensuring the most accurate results are obtained.
Free selectable validation, cleaning and calibration intervals.

Wide measuring range
The determination ranges of the CA6 Chromium Analyzer vary from trace µg/L to 50 mg/L Cr(VI) using internal dilution module.

Color touchscreen user interface
The CA6 Colorimeter 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.

Factory tested, ready for installation and operation
Just connect the power, sample, and reagent lines and the analyzer is fully operational.

Multiple streams
Dual streams version available. External Sequencer, switching up to 4 sample streams.



MEASUREMENT PRINCIPLE

The determination is based on the reaction of 1,5-Diphenylcarbazide with Chromium(VI) in an acid medium. The absorbance intensity is proportional to the chromium concentration in the sample and is measured at 525 nm.

TECHNICAL SPECIFICATIONS

Measured parameter:	Cr(VI) (ppb, ppm, mg/l).
Measuring principle:	Differential photometric absorbance. 1,5-Diphenylcarbazide (DPC)
Measuring range:	0.5 to 300 ppb Cr(VI) for the 26 mm cell - 0.01 to 1 ppm Cr(VI) for the 16 mm cell; up to 50 ppm Cr(VI) with internal dilution.
Reproducibility:	up to 50 ppb: ± 1 ppb or ± 5%, whichever is greater ≥ 50 ppb to 300 ppb: ± 2 ppb ± 5%, whichever is greater (26 mm cell) ≥ 300 ppb: ± 5 ppb or ± 5%, whichever is greater (16 mm cell).
Analysis frequency:	Freely programmable, batch near-continuous analysis.
Cycle time:	6-8 minutes, including conditioning before analysis cycle and rinsing after measuring.
Reaction cell:	Temperature heated
Sample:	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.)
Drain:	Pressure-free, atmospheric drain Connection: 12 mm (½-in.)
N° of streams:	1, 2 with integrated switching valve 3, 4 with external sequencer

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
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