

# MODEL CA6 - ALUMINUM ANALYZER

Compact online colorimeter for the automatic measurement of Aluminum in water

## APPLICATION FIELDS

- Drinking water
- Industrial waste water
- Municipal waste water
- 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 1.7L (0.45 US.gal) for the 16 mm cell / 2.5L (0.66 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 Aluminum Analyzer vary from trace  $\mu\text{g/L}$  to 20  $\text{mg/L Al}^{3+}$  using internal dilution module.

### Color touchscreen user interface

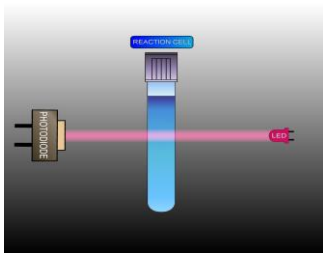
The CA6 Colorimeter is equipped with a graphic touchscreen interface showing measured values and status information. Easy access to menus and functions. Multiple languages. Integrated datalogger with USB download.

### 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

In a pH 6.2 to 6.4 buffered solution pyrocatechol violet and  $\text{Al (III)}$  ions form a blue dye.

The absorbance intensity is proportional to the aluminum concentration in the sample and is measured at 572 nm.

## TECHNICAL SPECIFICATIONS

Measured parameter:	Al <sup>3+</sup> (ppb, ppm, mg/l).	Dimensions (H x W x D):	23.6 x 15.0 x 8.2 in / 606 x 380 x 209 mm
Measuring principle:	Differential photometric absorbance. Pyrocatechol violet method	Weight:	Approx. 44 lbs (20 Kg)
Measuring range:	5 to 150 ppb Al <sup>3+</sup> for the 26 mm cell, 10 to 500 ppb Al <sup>3+</sup> for the 16 mm cell; up to 20 ppm Al <sup>3+</sup> with internal dilution.	Power supply:	Voltage: 100 - 240 VAC 50/60 Hz standard or 24 VDC (option) Power consumption: max. 80 VA
Reproducibility:	± 5 ppb or ± 5%, whichever is greater (26 mm cell) ± 10 ppb or ± 5% up to 250 ppb; ± 20 ppb or ± 5% (250-500 ppb), whichever is greater (16 mm cell)	Outputs:	2 x 4-20 mA outputs for measured data Modbus RTU RS485
Analysis frequency:	Freely programmable, batch near-continuous analysis.	Alarms:	4 SPDT programmable potential free relays
Cycle time:	8-10 minutes, including conditioning before analysis cycle and rinsing after measuring.	Digital input:	Remote start / stop
Reaction cell:	Temperature heated	Operating Temperature:	41 - 113 °F (5 - 45 °C)
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.)	Humidity:	10 to 90% non-condensing (indoor use, outdoor installation only possible with protective cabinet or shelter not included)
Drain:	Pressure-free, atmospheric drain Connection: 12 mm (½-in.)	Installation:	Wall mount (standard), bench top support or panel mount (options).
N° of streams:	1, 2 with integrated switching valve 3, 4 with external sequencer	Ingress Protection:	IP54

