

# Ultimate Corrosion Control

## Trace-level Chloride and Sulfate Monitoring



### Direct Detection of Chloride and Sulfate

The 3000CS provides a method for direct, on-line detection of corrosive ions without measurement interference from other ions or common additives.



### Fast Monitoring to Prevent Corrosion

Measurement cycles every 45 minutes ensure you can quickly react to chloride and sulfate excursions to prevent corrosive conditions from occurring.



### Reduced Monitoring Effort and Costs

Typical chloride and sulfate monitoring requires expensive resources and lab work. The 3000CS eliminates the need for these costly off-line tests.



### Versatile for Critical Applications

The 3000CS is designed for measurement in a range of power plant water applications, including monitoring steam quality, condensate, boiler feedwater, and makeup water quality.



## 3000CS Analyzer

### On-line Chloride and Sulfate Monitoring

The 3000CS is a reliable, on-line analyzer for direct measurement of chloride and sulfate in pure water and power plant cycle chemistry. This instrument detects these highly corrosive ions to prevent damage to critical power plant components.

This on-line chloride and sulfate analyzer uses the METTLER TOLEDO M800 transmitter with intuitive touchscreen interface to easily monitor cycle chemistry. It offers unique information such as trendlines for each measurement.

Discover the 3000CS Chloride and Sulfate Analyzer:

► [www.mt.com/3000CS](http://www.mt.com/3000CS)

# 3000CS Technical Data

## Measurement

Chloride measurement range	0–300 ppb
Chloride limit of detection	0.5 ppb
Chloride measurement accuracy	±5% of reading or ± 0.5 ppb; whichever is greater
Sulfate measurement range	0–300 ppb
Sulfate limit of detection	1 ppb
Sulfate measurement accuracy	±10% of reading or ±1 ppb; whichever is greater
Measurement cycle time	45 min typical, programmable between 15 minutes and 1 hour
Sample flow rate	25–50 mL/min
Sample temperature	10–45 °C (50–113 °F)
Sample pressure	0.3–7 bar (5–100 psig)
Grab sample measurement	Included; 100 mL capacity

## Outputs

Analog output	22 mA alarm, 500 ohm max load, not for use with externally powered circuit
Analog output accuracy	± 0.05 mA
Analog output scaling	Linear, bi-linear, logarithmic (1,2,3,4 decades), auto ranging
Relay contacts	Mechanical rated at 250 VAC, 3 Amps (Relay 1 NC, Relay 2 to 4 NO), 4-SPDT Type Reed 250 VAC or DC, 0.5 Amps (Relay 5 to 8)

## Installation/Power/Enclosure

Operator interface	Color touchscreen; Simultaneous display of ion concentrations and analyzer status
Process connection	Sample inlet: 6 mm or 1/4" OD tube SS compression fitting Drain hose: 19 × 25.4 mm (3/4" × 1"), 2 m (6 ft) length included
Power supply	100–240 VAC, 50–60 Hz, 100 W typical
Dimensions HWD	927 × 508 × 305 mm (36.5" × 20.9" × 12")
Weight	44 kg (97 lbs)
Ambient operating temperature	10–35 °C (50–95 °F)
Humidity	10–70% non-condensing
Ingress protection	IP66/NEMA4X (Electronics); IP55 (Enclosure)
Ratings/Approvals	CE, cULus
Built-in sequencer	No
Enclosure type	Full
Measurement parameter	Chloride and sulfate
Model family	3000CS

[www.mt.com/pro](http://www.mt.com/pro)

For more information

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Development, production and testing to ISO 9001.



CE Compliant



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Meets Canadian Standards