

# HACH CM130

# Chlorine Monitoring System for Dialysis

The Hach CM130 monitors total chlorine levels in pre-treatment water used in hemodialysis. The Hach CM130 Chlorine Monitoring System provides frequent analysis and immediate notification of high-chlorine events in dialysis centers by automatically testing chlorine levels in the water room every five to 20 minutes. Audio and visual status notifications then are sent to a remote indicator on the patient floor. The CM130's automated chlorine measurements are available for electronic export, facilitating compliant record-keeping for administrators and giving patient care staff the opportunity to focus their time on the patient floor.

#### **Exclusive Distribution Partner**

Cantel is the exclusive distributor of the Hach CM130 Chlorine Monitoring System for Dialysis.

#### **Immediate Notification**

Build confidence in your chlorine removal process with the Hach CM130. The system automatically measures chlorine levels every 5 minutes<sup>1</sup> with a standard, repeatable process and includes a remote indicator on the patient floor for immediate audio and visual notification of high-chlorine events.

## Facilitate Compliance

The CM130 digitally records automated chlorine measurements and makes these time-stamped values available for electronic export.

### Provider productivity

Online chlorine analysis and the remote indicator system deliver actionable insights to caregivers, giving them the opportunity to focus their time in the patient care environment.

# 510(k) Medical Device



## **Ordering Information**

Part No.	Hach Part No.	Description
Starter Package		
3032906	N/A	CM130 Chlorine Monitoring System with Installation & Starter Supply Kit including Performance Check Kit
Replacement Items		
3032894	9638600	CM130 Chlorine Monitoring System for Dialysis
3032896	9747300	CM130 Sample Conditioning/ Speaker Module Replacement Kit
3032897	9747400	CM130 Reagent Delivery Module Replacement Kit
3032899	9747500	CM130 Stir Motor Module Replacement Kit
3032898	9747600	CM130 Power Cord Replacement Kit
3032895	9730100	CM130 Remote Indicator Replacement Kit
3032902	9717200	CM130 Installation Kit
Maintenance Kits		
3032824	9717300	CM130 1 Month Reagent Supply Kit
3032892	9638900	CM130 Tubing Maintenance Kit
3032893	9746600	CM130 Performance Check Kit

<sup>1.</sup> Measurements may be aborted when the system detects a measurement quality issue, resulting in a longer measurement interval (up to 20 minutes).

## **Technical Data**

Product Specification	5	
Model	Hach CM130	
Material	Analyzer: PC/ABS case, PC door, PC hinges and latches, 316 SST hardware Remote indicator: PC/AB	
Display	10.9 cm (4.3 in.) color display, backlit LCD, WQVGA	
Dimensions	Analyzer: $37.0 \times 53.8 \times 22.6$ cm (14.6 x 21.2 x 8.9 in.) Remote indicator: $12.3 \times 29.4 \times 10.7$ cm (4.8 x 11.6 x 4.2 in.)	
Weight	Analyzer: 8.9 kg (19.6 lbs), Remote Indicator: 1.1 kg (2.5 lbs)	
Mounting	Analyzer: Wall, Remote indicator: Wall or ceiling	
Power Supply	Analyzer: 100 - 240 VAC, 50/60 Hz, 1 A max Remote indicator: Power is supplied by the analyzer. When power is not supplied by the analyzer, a lithium coin battery CR2032 (3 V) in the remote indicator will drive a power loss alarm.	
Operating Temperature	15 - 30 °C (60 - 85 °F)	
Operating Humidity	5 - 90 % non-condensing at 30 °C (85 °F) maximum	
Fitting Type	Sample line: ¼-in. OD push-to connect fitting for plastic tubing Drain line: slip-on fitting for ½-in. ID soft plastic tubing	
Cable	Ethernet: 100 m (328 ft) maximum, Ethernet cable with an RJ45 connector Remote indicator: 762 m (2500 ft) maximum, CAT5e/CAT6 type Ethernet cable with four twisted pair of 24 AWG solid copper wiring.	
	Make sure that the cable shielding includes an inner foil wrap around all of the pairs and an outer braid, also known as SFTP or SF/UTP. Do not use stranded or copper-clad aluminium conductors.	
Sample Pressure	2.76 - 6.89 bar (40 - 100 psi) nominal; pressure spikes 8.27 bar (120 psi) or less	
Sample Flow Rate	250 mL/min minimum	
Sample Temperature	15 - 30 °C (60 - 85 °F)	
Particle Size	15 μm or less	
Output	Analyzer: Two colors (amber and red) on the display and three sounds for notifications. The measurement and event history can be copied to an SD card as two separate files. Measurement data is available through the Ethernet connection.	
Cutput	Remote indicator: Two lights show the analyzer status (blue, amber or red). Two lights show the chlorine status (blue, amber or red). Three different sounds: hardware alarm, medium-high chlorine alert and high chlorine alarm.	
Data Logger	3000 measurements maximum	
Certifications	ETL certified to UL and CSA 61010-1 safety standard	
Light Source	LED, measurement at 510 nm	
Range	0.03 - 0.20 mg/L total residual chlorine as $\mathrm{Cl}_2$	
Measuring Interval	5 minutes*	
Accuracy	$\pm$ 0.03 mg/L as Cl $_{\scriptscriptstyle 2}$	
Repeatability	0.01 mg/L as $\mathrm{Cl_2}$	
Stabilization Time	Three measurement cycles after the analyzer is set to measurement mode. The first measurement shows 20 minutes after the analyzer is put into measurement mode.	
Lower Limit of Detection (LOD)	0.03 mg/L (ppm) as ${\rm Cl_2}$	
Reagent Consumption	0.5 L of buffer solution and 0.5 L of indicator solution each 31 days when in measurement mode 132 hours each week	

 $<sup>{}^{\</sup>star}\text{Measurements}$  may be aborted when the system detects a measurement quality issue, resulting in a longer measurement interval (up to 20 minutes).

Distributed by:

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