

# CM130 CHLORINE MONITORING SYSTEM FOR DIALYSIS



## You have to Be Right.

The Hach CM130 monitors total chlorine levels in pre-treatment water used in hemodialysis.

### Frequent Analysis & Immediate Notification

Build confidence in your chlorine removal process with the Hach CM130. The system automatically measures chlorine levels every 5 minutes\* 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 Regulatory Compliance

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

### Caregiver 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.

\*Measurements may be aborted when the system detects a measurement quality issue, resulting in a longer measurement interval (up to 20 minutes).

## Technical Data\*\*

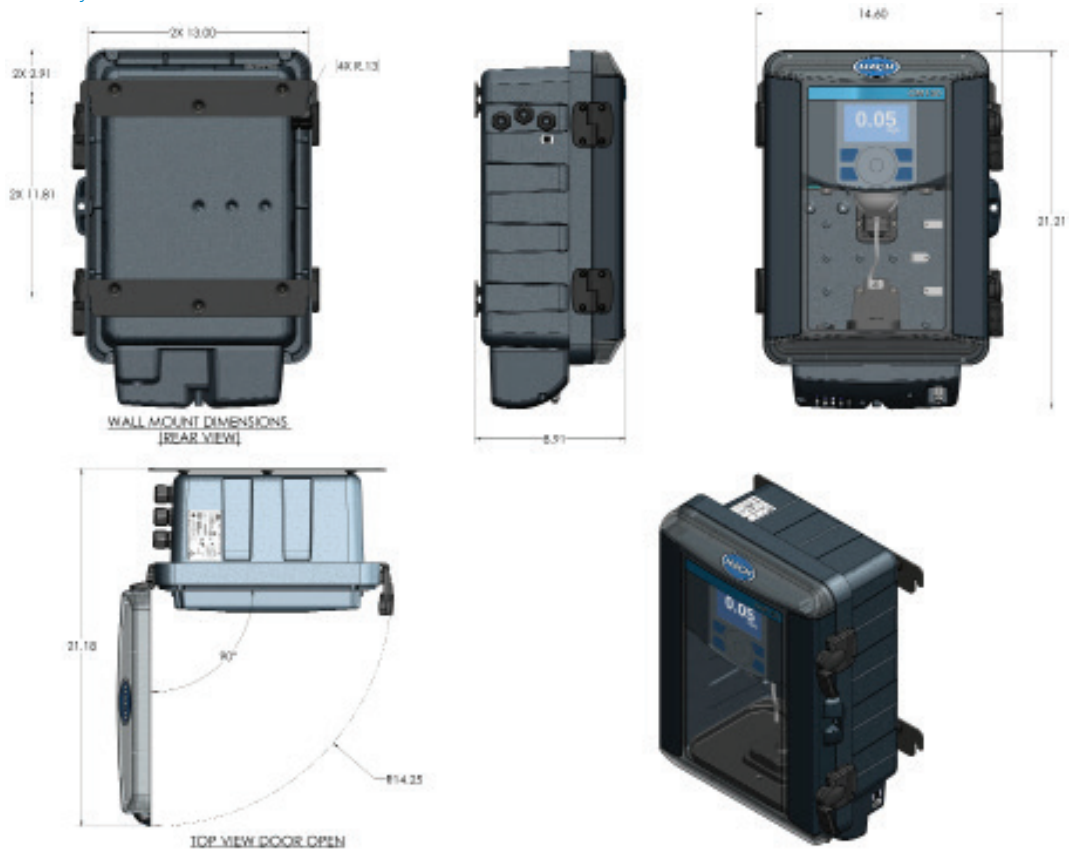
<b>Dimensions</b>	Analyzer: 37.0 x 53.8 x 22.6 cm (14.6 x 21.2 x 8.9 in.) Remote indicator: 12.3 x 29.4 x 10.7 cm (4.8 x 11.6 x 4.2 in.)	<b>Sample Pressure</b>	2.76 - 6.89 bar (40 - 100 psi) nominal; pressure spikes 8.27 bar (120 psi) or less
<b>Material</b>	Analyzer: PC/ABS case, PC door, PC hinges and latches, 316 SST hardware Remote indicator: PC/ABS	<b>Sample Flow Rate</b>	250 mL/min minimum
<b>Display</b>	10.9 cm (4.3 in.) color display, backlit LCD, WQVGA	<b>Sample Temperature</b>	15 - 30 °C (60 - 85 °F)
<b>Weight</b>	Analyzer: 8.9 kg (19.6 lbs) Remote Indicator: 1.1 kg (2.5 lbs)	<b>Particle Size</b>	15 µm or less
<b>Mounting</b>	Analyzer: Wall Remote indicator: Wall or ceiling	<b>Output</b>	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.  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.
<b>Protection Class</b>	I	<b>Data Logger</b>	3000 measurements maximum
<b>Pollution Degree</b>	2	<b>Certifications</b>	CISPR 11B, UL 61010A-1 (North America)
<b>Installation Category</b>	Category II	<b>Light Source</b>	LED, measurement at 510 nm
<b>Power Supply</b>	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.	<b>Range</b>	0.03 - 0.20 mg/L total residual chlorine as Cl <sub>2</sub>
<b>Operating Temperature Range</b>	15 - 30 °C (60 - 85 °F)	<b>Measuring Interval</b>	5 minutes*
<b>Operating Humidity</b>	5 - 90 % non-condensing at 30 °C (85 °F) maximum	<b>Accuracy</b>	± 0.03 mg/L as Cl <sub>2</sub>
<b>Fitting Type</b>	Sample line: ¼-in. OD push-to-connect fitting for plastic tubing  Drain line: slip-on fitting for ½-in. ID soft plastic tubing	<b>Repeatability</b>	0.01 mg/L as Cl <sub>2</sub>
<b>Cable</b>	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 pairs 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.	<b>Stabilization Time</b>	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.
		<b>Lower Limit of Detection (LOD)</b>	0.03 mg/L (ppm) as Cl <sub>2</sub>
		<b>Reagent Consumption</b>	0.5 L of buffer solution and 0.5 L of indicator solution each 31 days when in measurement mode 132 hours each week

\*Measurements may be aborted when the system detects a measurement quality issue, resulting in a longer measurement interval (up to 20 minutes).

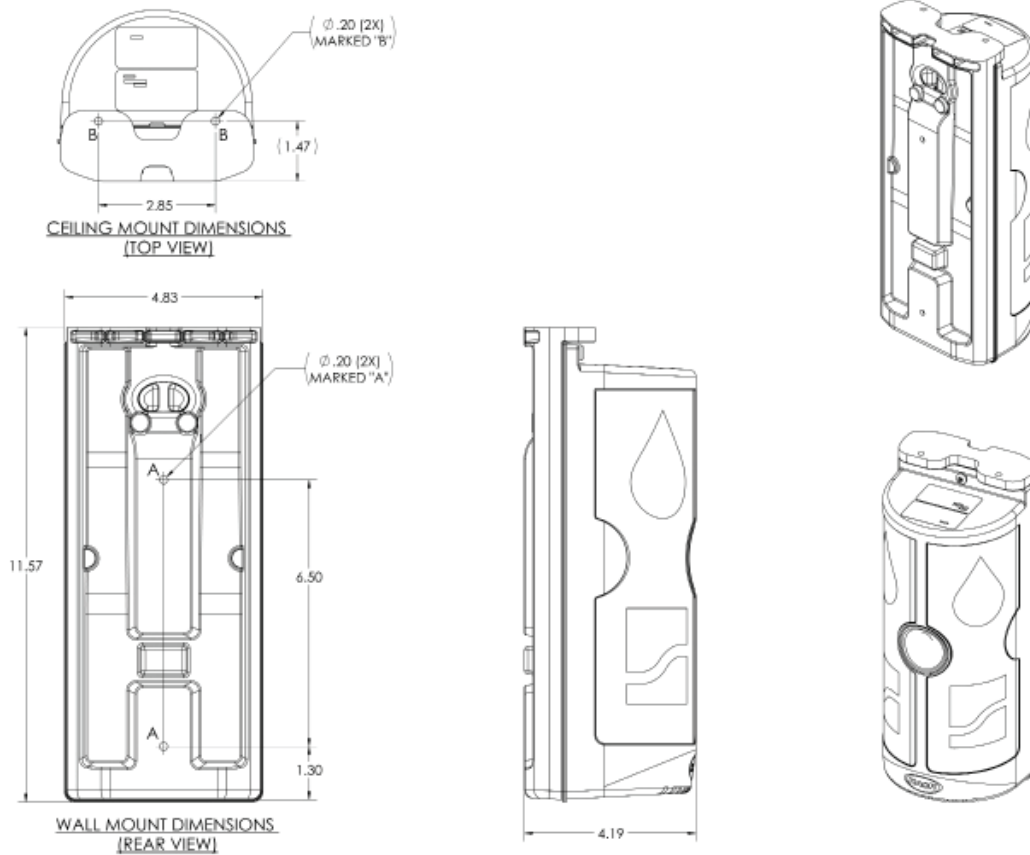
\*\*Subject to change without notice.

## Dimensions

### CM130 Chlorine Analyzer



### Remote Indicator



## Order Information

### Instrument

**CM130.US** CM130 Chlorine Monitoring System for Dialysis

### Replacement Parts

**9746600** CM130 Performance Check Kit  
**9747300** CM130 Sample Conditioning/Speaker Module Replacement Kit  
**9747400** CM130 Reagent Delivery Module Replacement Kit  
**9747500** CM130 Stir Motor Module Replacement Kit  
**9747600** CM130 Power Cord Replacement Kit  
**9730100** CM130 Remote Indicator Replacement Kit  
**9717200** CM130 Installation Kit  
**9638900** CM130 Tubing Maintenance Kit

### Maintenance

**9717300** CM130 Monthly Maintenance Kit (1 Month Supply)  
**9756600** CM130 Monthly Maintenance Kit (6 Month Supply)  
**9746800** CM130 Periodic Maintenance Bundle  
 Includes 9746600 and 9638900



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