

# NA5600sc Online Sodium Analyzer

- Applications**
- Industrial Water
  - Power



## Ensure uptime with accurate, low-level sodium measurements and predictive diagnostics.

Be confident in your steam cycle water with proprietary predictive diagnostic tools, automatic electrode reactivation to avoid downtime, less maintenance with 90-day reagent replacement, and a convenient small footprint for easy integration with the new Hach<sup>®</sup> NA5600sc Sodium Analyzer.

### Optimize Operation and Response Time with Automatic Electrode Reactivation

To maintain optimum response time and accuracy, the NA5600sc analyzer provides automatic electrode reactivation. Reactivation uses non-hazardous chemicals and eliminates the need for manual reactivation or electrode etching.

### Space-Saving Design

Smaller instrument footprint with streamlined layout to allow for easy integration into existing or new sites.

### Low Maintenance

Maintenance of the NA5600sc Sodium Analyzer requires reagent replenishment only every 90 days and annual replacement of reagent tubing and the sodium electrode. Clear step-by-step instructions are provided to simplify maintenance operations.

### Avoid Downtime

Predictive diagnostic tools, including Hach's proprietary Prognosis technology, warning LEDs, and high visibility notification screens let you avoid unplanned downtime.



## Technical Data\*

<b>Range</b>	<p>Analyzers without cationic pump: 0.01 ppb - 10,000 ppb</p> <p>Analyzers with cationic pump: 0.01 ppb - 200 ppm</p>	<b>Protection Rating</b>	<p>Analyzer with enclosure: NEMA 4/IP65</p> <p>Analyzer without enclosure: IP65, PCBA housing</p>
<b>Repeatability</b>	< 0.02 ppb or 1.5% reading (whichever is greater) within $\pm 10$ °C ( $\pm 50$ °F) variation	<b>Display</b>	Colored 5.7" LCD
<b>Lower Limit of Detection (LOD)</b>	0.01 ppb	<b>Analog Outputs</b>	<p>6 isolated, 0 - 20 mA or 4 - 20 mA; load impedance: 600 Ohm maximum</p> <p>Connection: 0.644 - 1.29 mm<sup>2</sup> (24 - 16 AWG) wire; 0.644 - 0.812 mm<sup>2</sup> (24 - 20 AWG) recommended, twisted pair shielded wire</p>
<b>Response Time</b>	<p>From 0.1 ppb to 10 ppb: T90 <math>\leq</math> 3 minutes, T95 <math>\leq</math> 4 minutes</p> <p>From &lt; 1 ppb to 100 ppb: T90 &lt; 2 minutes, T95 &lt; 3 minutes (about 150 s)</p>	<b>Relay Output</b>	<p>6; type: not powered SPDT relays, each rated at 5 A resistive, 240 VAC maximum</p> <p>Connection: 1.0 - 1.29 mm<sup>2</sup> (18 - 16 AWG) wire; 1.0 mm<sup>2</sup> (18 AWG) stranded recommended, 5 - 8 mm O.D. cable</p>
<b>Calibration Method</b>	<p>Automatic with known addition</p> <p>Manual: 1 or 2 points</p>	<b>Digital Inputs</b>	<p>6; non programmable, isolated TTL type digital input or as a relay</p> <p>Open - collector type input 0.644 - 1.29 mm<sup>2</sup> (24 - 16 AWG) wire; 0.644 - 0.812 mm<sup>2</sup> (24 - 20 AWG) stranded recommended</p>
<b>Sample conditioner</b>	<p>For non-cationic applications: Di-isopropylamine (DIPA) (1 L/90 days) at 25 °C for a sample pH target of 10.5</p> <p>For cationic applications: DIPA (1 L/month) at 25 °C for a sample pH target of 10.5</p>	<b>Material</b>	Polyol case, PC door, PC hinges and latches, 304/316 SST hardware
<b>Number of Channels</b>	1, 2 or 4 with programmable sequence	<b>Dimensions</b>	<p>Analyzer with enclosure: 681 mm x 452 mm x 335 mm (H x W x D)</p> <p>Analyzer without enclosure: 681 mm x 452 mm x 254 mm (H x W x D)</p>
<b>Max. Concentration of Suspended Solids in Sample</b>	<p>&lt; 2 NTU, no oil, no grease</p> <p>For boiler sample type install approx. 100 <math>\mu</math>m filter</p>	<b>Weight</b>	<p>Analyzer with enclosure: 20 kg (40.1 lb) with empty bottles</p> <p>Analyzer without enclosure: 14 kg (30.7 lb) with empty bottles</p>
<b>Acidity</b>	< 50 ppm, non-cationic application < 250 ppm, cationic application	<b>Maintenance Interval</b>	Every 90 days: refill electrolyte, reactivation, conditioning, and calibration solution
<b>Sample Temperature</b>	5 - 45 °C (41 - 113 °F)		
<b>Ambient Temperature</b>	5 - 50 °C (41 - 122 °F)		
<b>Sample Pressure</b>	0.2 - 6 bar (3 - 87 psi)		
<b>Sample Flow Rate</b>	100 - 150 mL/min (6 - 9 L/h)		
<b>Inlet</b>	<p>Sample line and sample bypass drain: 6 mm O.D. push-to-connect fitting for plastic tubing</p> <p>Chemical and case drains: 7/16 inch I.D. slip-on fitting for soft plastic tubing</p>		
<b>Power Requirements (Voltage)</b>	100 - 240 VAC		
<b>Power Requirements (Hz)</b>	50/60 Hz		

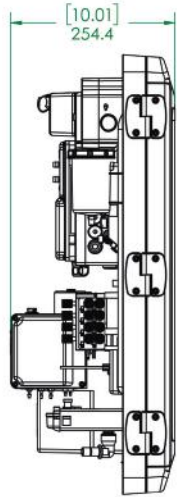
\*Subject to change without notice.

## Principle of Operation

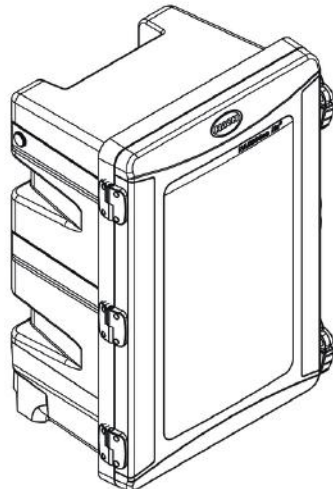
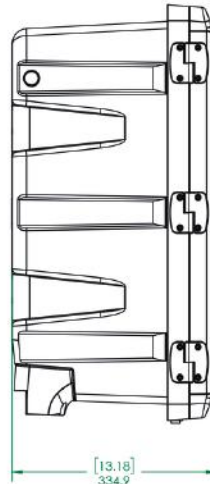
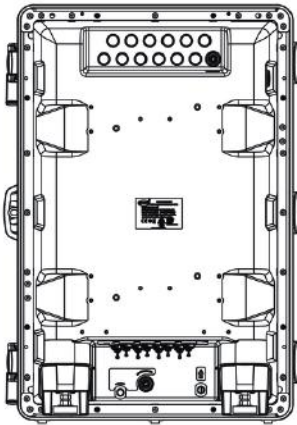
The Hach NA5600sc Sodium Analyzer uses an ion-selective electrode measurement after pH conditioning. Sample pH conditioning is essential for limiting the interference of temperature or other ions on sodium measurement. Constant, temperature-compensated buffering is assured using regulated reagent addition across sample pH and temperature changes. In case of a multichannel version the “smart” rinsing sequence between channels ensures a minimum cycle time of 10 minutes and no carry-over effect.

## Dimensions

*Panel Version*



*Enclosure Version*



## Order Information

### Analysers\*

Unit with Enclosure	Panel Mount Unit	
LXV526.97.1011A	LXV526.97.2011A	NA5600sc Sodium Analyzer, 1-channel
LXV526.97.1012A	LXV526.97.2012A	NA5600sc Sodium Analyzer, 2-channel
LXV526.97.1014A	LXV526.97.2014A	NA5600sc Sodium Analyzer, 4-channel
LXV526.97.1111A	LXV526.97.2111A	NA5600sc Sodium Analyzer, 1-channel, with Autocalibration
LXV526.97.1112A	LXV526.97.2112A	NA5600sc Sodium Analyzer, 2-channel, with Autocalibration
LXV526.97.1114A	LXV526.97.2114A	NA5600sc Sodium Analyzer, 4-channel, with Autocalibration
LXV526.97.1211A	LXV526.97.2211A	NA5600sc Sodium Analyzer, 1-channel, with Cation Kit
LXV526.97.1212A	LXV526.97.2212A	NA5600sc Sodium Analyzer, 2-channel, with Cation Kit
LXV526.97.1214A	LXV526.97.2214A	NA5600sc Sodium Analyzer, 4-channel, with Cation Kit
LXV526.97.1311A	LXV526.97.2311A	NA5600sc Sodium Analyzer, 1-channel, with Cation Kit & Autocalibration
LXV526.97.1312A	LXV526.97.2312A	NA5600sc Sodium Analyzer, 2-channel, with Cation Kit & Autocalibration
LXV526.97.1314A	LXV526.97.2314A	NA5600sc Sodium Analyzer, 4-channel, with Cation Kit & Autocalibration

\*Please note that reagents are not included and need to be purchased separately.

### Upgrade Options

8371200	Kit, K-pump NA5600sc
9013200	Modbus RS232/485 Module
9173900	Profibus DP Module
8425700	Hart Module
8428000	Prognosys NA5600sc License Kit

### Accessories

595=010=000	Sample Filter, 100 micron, metric fittings
595=010=005	Sample Filter; 100 micron, imperial fittings
8368900	Kit, Heater Exchange, NA5600sc

### Consumables and Spare Parts

9660500	NA5600sc one year spare parts kit
595=010=906	Replacement Filter Cartridges, pk/6
363140,00500	Reference Electrolyte, KCl, 3 M, 500 mL
2834453	Di-isopropylamine (DIPA), 1 L
2835153	Sodium Standard, 10 ppm, 1 L
2834253	Sodium Standard, 100 ppm, 1 L
2507149	Sodium Nitrate, 0.5M, 500 mL



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