

Product Overview

MIURA's Colormetry CMU-324HE is a hardness detection device that utilizes colorimetric analysis to monitor ionic concentration in pre-treated soft water. The CMU-324HE periodically samples softened water, and tests for the presence of harmful contaminants that should have been removed by the softener system. If hardness is detected as a result, the colormetry unit visually and audibly alerts the boiler operator and signals a caution or an alarm (selectable) to the boiler control system. This information is utilized by the Miura MW Softener system, allowing the MW-U to react to hardness leakage by swapping the active tank and automatically regenerating to prevent further hardness leakage. When the unit is connected to a Miura boiler, the caution will trigger an increase in surface blowdown volume to reduce potential scale formation and harm to the boiler until the problem can be resolved.

Standard Features

• Automated Scheduled Testing

Periodically samples softened water, and performs colorimetric analysis to determine hardness concentration. These timed increments can be set from every 30 minutes to every 240 minutes.

• Communication

Communicates testing results with Miura components or building automation system to alert operators of a problem and to initiate countermeasures. When a Miura boiler receives a hardness caution, the boiler responds by temporarily increasing the surface blowdown to prevent scale formation.

• Signals Softener Regeneration

If hardness leakage is detected, the Colormetry unit can signal the MW-U softener to start regenerating. Utilizing its dual-tank design, the active and idle tanks will swap, providing the boiler system with soft water once again. Then, the leaking tank will be regenerated via a saline wash to replenish the softener resin's effectiveness.

• Easy-to-replace Cartridges and Filters

When the reagent cartridge reaches low capacity, the cartridge status light will illuminate signaling a replacement is needed. Simply release the cartridge lock, pull out depleted cartridge, insert new cartridge and close lock to continue normal testing operations.

• Self-Calibrating

The Colormetry unit performs a true-zero test before every automated sampling. This saves valuable boiler operator time and ensures accurate results from every test.

• Alarm and Fault History Logging

When an alarm or caution is signaled, the Colormetry unit displays the alarm fault codes that assist the operator in resolving the problem and sends fault code information to the Miura Online Maintenance (MOM) program. Up to five previous cautions or alarms are stored for operator reference.



Colormetry Testing Flow

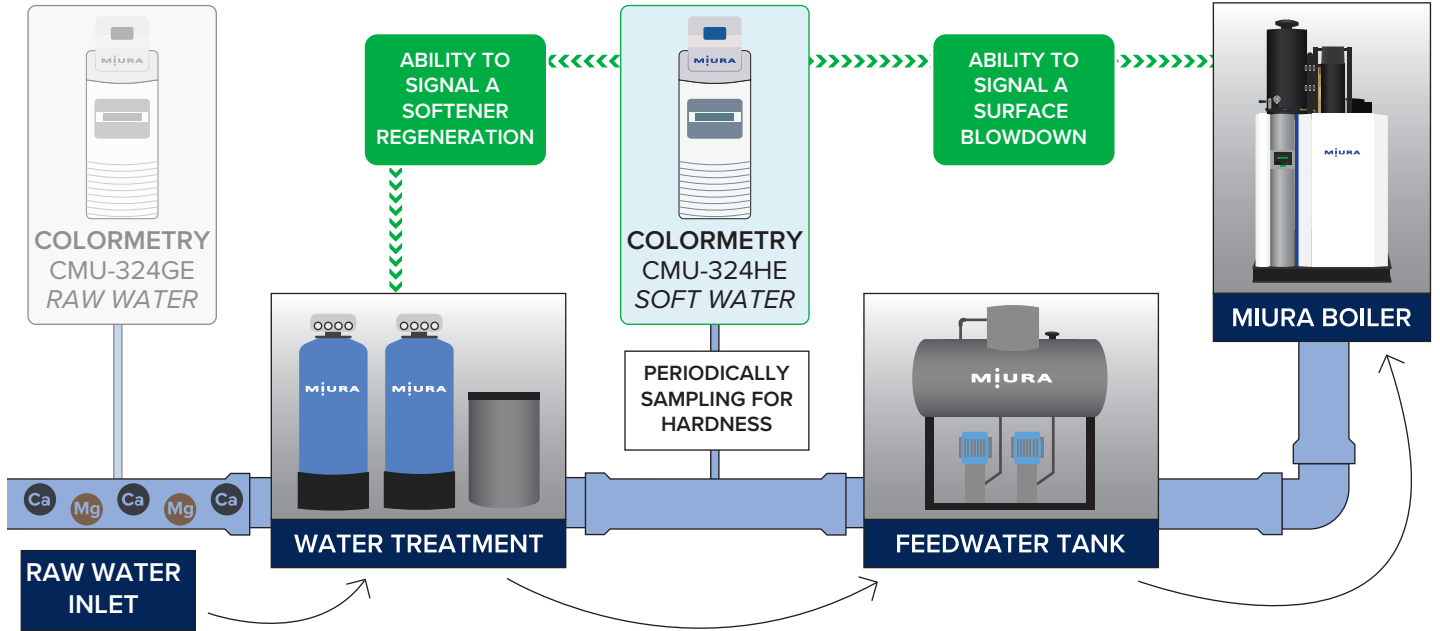


Colormetry Hardness Tester

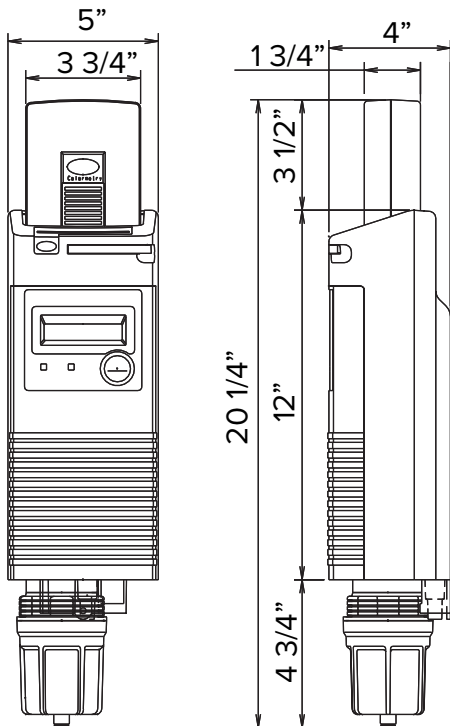
CMU-324HE (Soft Water Series)

FOR REFERENCE ONLY!
NOT FOR ENGINEERING PURPOSES.
 Contact your sales representative for latest drawings and data.

Water Flow Diagram



Specifications



Item	Specification
Model	CMU-324HE
Power Supply	120 VAC
Power Consumption	15W
Ambient Operating Temperature	41°F - 122°F
Raw Water Temperature	41°F - 104°F
Raw Water Pressure	7.2 - 71 PSI
Installation Method	Indoor Wall-mount Type
Overall Dimensions (W × D × H)	5" × 4" × 20.25" 125mm × 100mm × 515mm
Weight	1.9kg / 4.2lb
Evaluation Ranges	Hardness displayable in 5 ranges: 0mg/L, 1mg/L, 2mg/L, 3mg/L, >5mg/L
Alarm/Caution Ranges	1mg/L and up, 2mg/L and up, 3mg/L and up, 5mg/L and up (choose one)
Reagent Replacement Cycle	*Every 4 months
Number of Stored Data Points	10,000 (measurement date & time and results)

*Depends on usage