

## ResidualHQ

### Technical Specifications

#### Technology Description:

Disinfectant control system designed for continuous monitoring and management of disinfectant residual levels. Flexible control and fluid interface allows for integration into new and existing installations. Limited maintenance, simple single-point calibration for disinfectant residual sensors.

#### Features:

- Continuous Water Quality Monitoring
- Automated Control Modes and Management
- No Metering Pumps. Venturi's used for chemical injection
- Automated rinsing and flushing mechanisms limit system exposure to concentrated disinfectants

#### Applications:

- Chlorinated and Chloraminated Systems
- Tanks and Reservoirs
- Pipelines

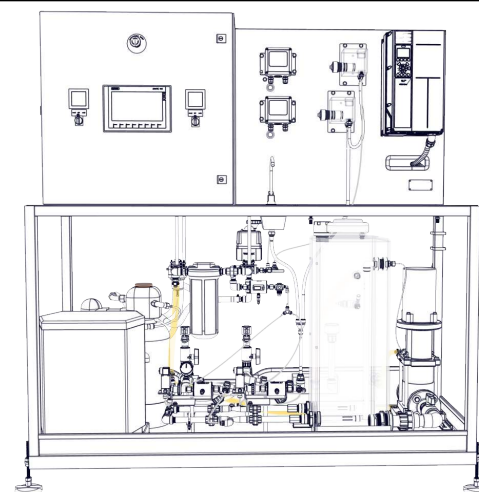


Figure 1: ResidualHQ Workstation

#### Physical Specifications:

	Tank	Pipeline
<b>Water Quality Monitoring</b>	Total and Free Chlorine via two (2) amperometric membrane sensors	
<b>Feed Rate</b>	0 - 2.5 gph. Larger systems available. Contact Ixom Watercare, Inc. for more information.	
<b>Duty Cycle</b>	Continuous, 100%	
<b>Maximum Working Pressure</b>	95 psi. Higher pressures available. Contact Ixom Watercare, Inc. for more information.	
<b>Chemical Compatibility</b>	Sodium Hypochlorite (up to 15%) Liquid Ammonium Sulfate (up to 40%)	
<b>Electrical Requirements</b>	230VAC 30A Service 1PH 60Hz (11A continuous)	
<b>Fluid Connections</b>	<ul style="list-style-type: none"> <li>• Sample/Motive [Inlet]</li> <li>• Return [Outlet]</li> <li>• Soft Source [Outlet]<sup>1</sup></li> <li>• Drain [Outlet] - 1.00" FNPT</li> <li>• Vent [Outlet]</li> <li>• Chlorine [Inlet]</li> <li>• Ammonia [Inlet]<sup>2</sup></li> </ul> Unless noted, all terminate as 0.5" FNPT	<ul style="list-style-type: none"> <li>• Sample/Motive [Inlet] - 2" FNPT</li> <li>• Return [Outlet] - 2" FNPT</li> <li>• Soft Source [Outlet]<sup>1</sup></li> <li>• Drain [Outlet] - 1.00" FNPT</li> <li>• Vent [Outlet]</li> <li>• Chlorine [Inlet]</li> <li>• Ammonia [Inlet]<sup>2</sup></li> </ul> Unless noted, all terminate as 0.5" FNPT
<b>Dimensions and Weights</b>	750 lbs 30" D x 72" W x 74" T	800 lbs 30" D x 72" W x 74" T

<sup>1</sup> Optional. Provides softened and filtered water to dilute bulk storage chemical if desired.

<sup>2</sup> Chloraminated systems only.

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#### Controller Specifications:

	Tank	Pipeline
Display	7" Color Touchscreen	
Keyboard	7-key membrane type with tactile feedback	
Digital Inputs	-	1x 24VDC for: <ul style="list-style-type: none"> <li>Run/Enable</li> </ul>
Relay Outputs	230VAC/30VDC 6A N.O./N.C. rated contacts for: <ul style="list-style-type: none"> <li>System OK</li> <li>Residual In-Range</li> </ul>	
Programmable Analog Inputs	3x 4-20mA current inputs for:	
	<ul style="list-style-type: none"> <li>Bulk Ammonia Storage</li> <li>Bulk Chlorine Storage</li> <li>Tank Level</li> </ul>	<ul style="list-style-type: none"> <li>Bulk Ammonia Storage</li> <li>Bulk Chlorine Storage</li> <li>Pipeline Flow Rate (required)</li> </ul>
Communication	Modbus RTU (RS-485) <ul style="list-style-type: none"> <li>Read and Write operations supported (Remote Control)</li> </ul>	
Local Data Logging	Local via USB comes standard. Various parameters available <ul style="list-style-type: none"> <li>Trending Process Values</li> <li>Warnings</li> <li>Alarms</li> </ul>	
Diagnostic Support	Remote Monitoring available. <i>Cellular 4G LTE service availability required.</i>	
Available Operating Modes	<ul style="list-style-type: none"> <li>Manual Dosing</li> <li>Automated Management</li> <li>Maintenance (local)</li> </ul>	<ul style="list-style-type: none"> <li>Manual Dosing</li> <li>Feed Schedule</li> <li>Automated Feed Control</li> <li>Maintenance (local)</li> </ul>

#### Dimensions:

