



The Culligan Industrial Smart Controller



Reduce Risk and Accelerate Your ROI with the Culligan Smart Controller

For companies using water treatment in their production processes consistency of water quality can reduce process downtime and business risk. Culligan's exclusive advanced electronic capabilities enables companies to operate at improved efficiency and continuously provide high quality water. With the cost effective Smart Controller, which comprises of multiple sensors, our customers can monitor their water treatment equipment performance and maintenance needs, at a single site or across multiple ones 24 hours a day. This may help avert system failure, reduce potential production delays and decrease overall operating costs through predictability of maintenance needed.

Control your Culligan Matrix Solutions™ equipment with a totally integrated Culligan Smart Controller.



Pre-Treatment Solutions



Membrane Solutions



Deionization Solutions



Storage Solutions



Distribution Solutions

Exclusive Culligan Smart Controller Advanced Electronics Include:

- **Historical Operating Data**

Starting at the time of installation, system operating data is stored and can be accessed to monitor trends over time.

- **Alarm Recognitions**

The Culligan Smart Controller allows you to monitor and set lower and upper limits on a number of system parameters. As a result you can respond quickly to system variations and promote consistent water quality.

- **Wireless Remote Monitoring Options**

If the water treatment equipment is in a location that is difficult to access or far from a manager's office, you can use the remote display to monitor the system, up to 200 ft away from the installation.

- **SCADA / Control Room PLC Interface**

The Culligan Smart Controller can operate as a remote terminal unit (RTU) and can be monitored directly by the Customer's control room SCADA system. Connections are available into RS232, RS485, USB and Modbus communication networks.

- **Telemetry Options**

With telemetry options, you can connect your Matrix water treatment system via landline or cellular phone to Culligan. This exclusive feature allows us to monitor your system centrally and service your system locally.

- **US Standard and Metric Readings**

With an easy to program key pad and display, you can program and view your system parameters in either US Standard or Metric units.

Culligan Smart Controller Supports Culligan Exclusive Features:

- **Aqua-Sensor®**

Culligan's patented digital Aqua-Sensor® for water softeners adjusts to influent water conditions (i.e. water quality, pressure, flow rate etc.) and signals the need for regeneration based on resin bed exhaustion. It also controls the duration of the brine rinse cycle. As a result, you may realize significant salt and water savings which lead to reduced operating costs and accelerated return on investment (ROI).

- **Brine Reclaim**

Culligan's brine reclaim feature for water softeners can help reduce salt consumption up to 25% or more and reduce discharge to drain leading to additional operating efficiencies. This feature allows Culligan to design a solution around your overall water management/wastewater minimization needs and sustainability goals.

- **Progressive Flow**

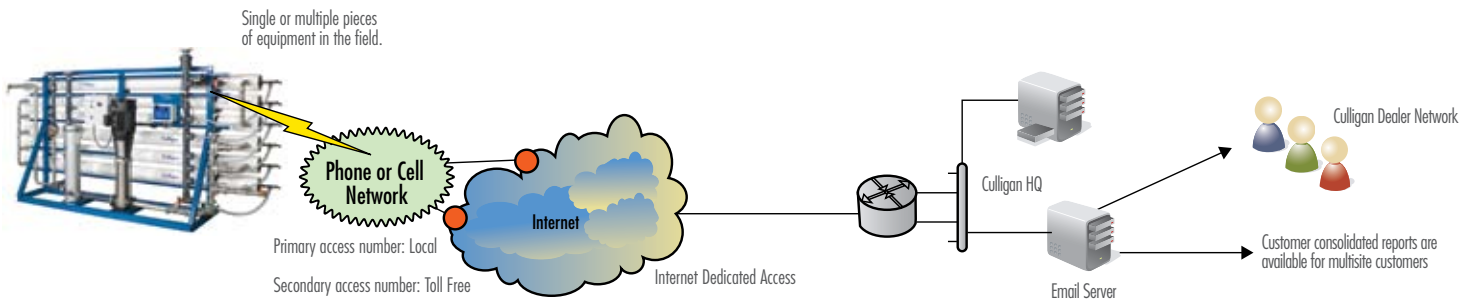
With Culligan's patented progressive flow feature, you can size softeners and filters based on average water usage, which helps reduce capital costs. The feature is best suited for applications requiring intermittent/periodic high flow rates. The Culligan Smart Controller monitors water demand and brings additional tanks online or offline as the flow demand changes.

1 Equipment in the field

2 Data travels worldwide via phone, cellular, satellite and Internet

3 All data stored and backed-up for later retrieval

4 Customer and Service Techs alerted



A Customized Communication Level Based on Your Monitoring Needs.

Service Level 1

- The water treatment system calls the Culligan Server once per day.*
- If there is an error, a consolidated report is e-mailed to the Culligan dealership the next morning.

* Available only on Reverse Osmosis, Ultra-Filters and Culligan Store Solutions Vending Units.

Service Level 2

- The water treatment systems calls the Culligan Server once per day.*
- If there is an error, a report is e-mailed immediately to the Culligan dealer and customer.
- A monthly report is generated and sent to the dealership and customer.

Monitoring Options Tailored to Your Culligan Matrix Solutions Equipment.

Pretreatment Solutions

Filters

- Regen cycle number
- Total gallons since new
- Remaining filter life (gallons)
- No remote display signal
- Motor position not found
- Position sensor error
- External alarm input
- Replace Filter/Media

Softeners

- Regen cycle number
- Days since last regeneration
- AVG number of days between regenerations
- Number of salt days remaining
- Salt bridge
- Brineline blockage
- Brine tank overflow
- No remote display signal
- Motor position not found
- Position sensor error
- External alarm input
- Low salt

The above monitoring options are standard. If you are interested in other monitoring options, please contact Culligan.

Membrane Solutions

Reverse Osmosis Systems

- Total feed water since new
- Total product water since new
- Total pump hours
- Most recent product TDS
- Daily average gallons of product water produced
- Feed water temperature
- Most recent RO% recovery
- Most recent RO% rejection
- Most recent pump discharge pressure
- Most recent membrane pressure drop
- Most recent RO membrane normalization data
- Most recent temperature
- Any current error flags

Ultra-filtration Systems

- Average daily usage
- Total gallons since new
- Peak flow rate
- Membrane production

Polishing Solutions

PEDI

- Current flow rate
- Daily usage volume
- Average daily usage
- Total gallons since new
- External filter capacity
- Two auxiliary switches (i.e. monitor TDS alarm, tank switch over etc).

CEDI

- Product quality
- Product flow rate
- Reject flow rate
- Feed water temperature

The Culligan Smart Controller can also monitor other equipment, signals and alarms

- Flow rates
- Pressure
- TDS/water quality
- Analog voltage input signals
- Dry contact inputs

A Global Monitoring Solution with Customized Local Service.



Over 800 Culligan Dealers in more than 90 countries

Algeria	Croatia	Guatemala	Kenya	Norway	Singapore	Thailand
Angola	Cyprus	Guine Bissau	Korea	Oman	Slovak Republic	Trinidad
Argentina	Czech Republic	Haiti	Kuwait	Pakistan	Slovenia	Tunisia
Australia	Dubai	Honduras	Laos	Panama	South Africa	Turkey
Austria	Ecuador	Hong Kong	Laticva	Peru	Spain	Turkish Republic of Northern
Bahamas	Egypt	Hungary	Lebanon	Philippines	Sri Lanka	Cyprus
Belgium	El Salvador	Indonesia	Lithuania	Poland	St. Maarten NA	UK
Belize	Estonia	Ireland	Malta	Portugal	St. Thomas	Ukraine
Bermuda	Finland	Israel	Mexico	Puerto Rico	Sweden	USA
Cambodia	France	Italy	Morocco	Qatar	Switzerland	Venezuela
Canada	Germany	Jamaica	Mozambique	Romania	Tahiti	Vietnam
China	Greece	Japan	New Zealand	Saudi Arabia	Taiwan	
Costa Rica	Guam	Jordan	Nigeria	Serbia	Tanzania	

Finally, an end-to-end solution from a single source.



Place your industrial and commercial water treatment needs in the hands of a global leader.

For over 70 years, Culligan has made better water. Our global network, comprised of 800+ dealers and international licensees in over 90 countries, is dedicated to addressing your water-related problems. As a worldwide leader in water treatment, our sales representatives and service technicians are familiar with the local water conditions in your area. Being global and local position us to deliver customized solutions to commercial and industrial water issues that affect your business and your bottom line.

www.culliganmatrixsolutions.com • 866-787-4293

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