

# STRANTROL® DCS DISINFECTION CONTROL SYSTEM



## FUNCTION

- Accurately and reliably controls chlorination and dechlorination to match the ever-changing contact chamber organic and ammonia loads, regardless of flow.
- Monitors headworks and critical processes such as biological nutrient removal and wastewater aeration.
- Combines HRR technology with Residual measurement and the latest microprocessor technology features to create an advanced, fully interactive disinfection and dechlorination control system. Integrates sensor, transmitter, controller, data logger and interactive communication in a single system.
- Controls wastewater disinfection in applications where lag times are long and varying through SloLogic™ control. The result is a process variable in compliance more than manual control, flow pacing, PID, or flow pacing plus PID.

*Today, disinfection and dechlorination in water can be precisely controlled by High Resolution Redox® (HRR), a result of USFilter's Stranco Products research. In over 50,000 applications worldwide, HRR technology is used to control the addition of chlorine, bromine, ozone, sulfur dioxide, sodium metabisulfite and sodium bisulfite. Using proven residual analyzer technology in combination with patented HRR sensing, the Strantrol DCS provides an unbeatable combination of disinfection and dechlorination control with backup technology crosschecks, and override control.*

## WORKING TO BETTER CONTROL WASTEWATER DISINFECTION

### INPUTS

RS-485 digital network signal used to communicate with Strantrol® 880 (HRR) and 881 (Residual) transmitters. The Strantrol transmitter's place the HRR and residual signals on the proprietary RS-485 network and control automatic sensor or sample line washing. (Strantrol 880 & 881 units may be located up to 4,000 feet away from the Strantrol 960 controller).

Four 4-20mA flow input signals (an effluent flow input is strongly recommended for SloLogic™ control).

Six channels are available for Strantrol 880 inputs (3 each HRR & pH). Three channels are available for Strantrol 881 inputs.  
120/240 VAC, single phase 50/60Hz

### OUTPUTS

Isolated fully rangeable 4-20 mA outputs—up to 1000 ohm load, accuracy of +/- .02 mA. Six channels are available, and each is configurable as either recorder or control. There is a maximum of 3 control channels.

4-20 mA SloLogic control

8 solid state alarm relays can be configured as either a general alarm or a selectable specific alarm.

Timed 120/240 VAC, 5 amp for automatic sensor clean with track-&-hold (function of 880 and 881 transmitter).

### OPTIONS

**Sensor** - High Resolution Redox, Free Chlorine, Total Chlorine and pH are available.

**Submersible Sensor Assembly (HRR or pH)** - The heavy duty submersible sensor assembly is specifically designed for applications where automatic sensor wash is needed and/or where the sensor is to be

located in high turbulence or high flow environments such as a contact chamber, open tank or channel. To add automatic sensor wash, purchase the 880 transmitter with the automatic probe clean assembly. (part no. 5890005)

**Flowcell (HRR or pH)** - The flowcell is designed for applications requiring sensing in a pressurized line. The USFilter flowcell is rated at 100 psi (6.9 bar) and comes with all the necessary fittings including two isolation valves and a sample tap. The clear flowcell cover permits on-line sensor tip inspection. Add automatic sensor wash to the flowcell design by requesting the optional diaphragm pump and tank package. (part no. 7149002)  
*Note: Not recommended for Wastewater HRR applications.*

**Residual** - The residual analyzer sensor assembly is supplied with an optional submersible sample pump and a line wash pump. The sensor assembly is enclosed in a weather resistant enclosure and will include all required reagents and containers.

## COMMUNICATION

RS-232 direct computer connection (up to 38,400 baud)

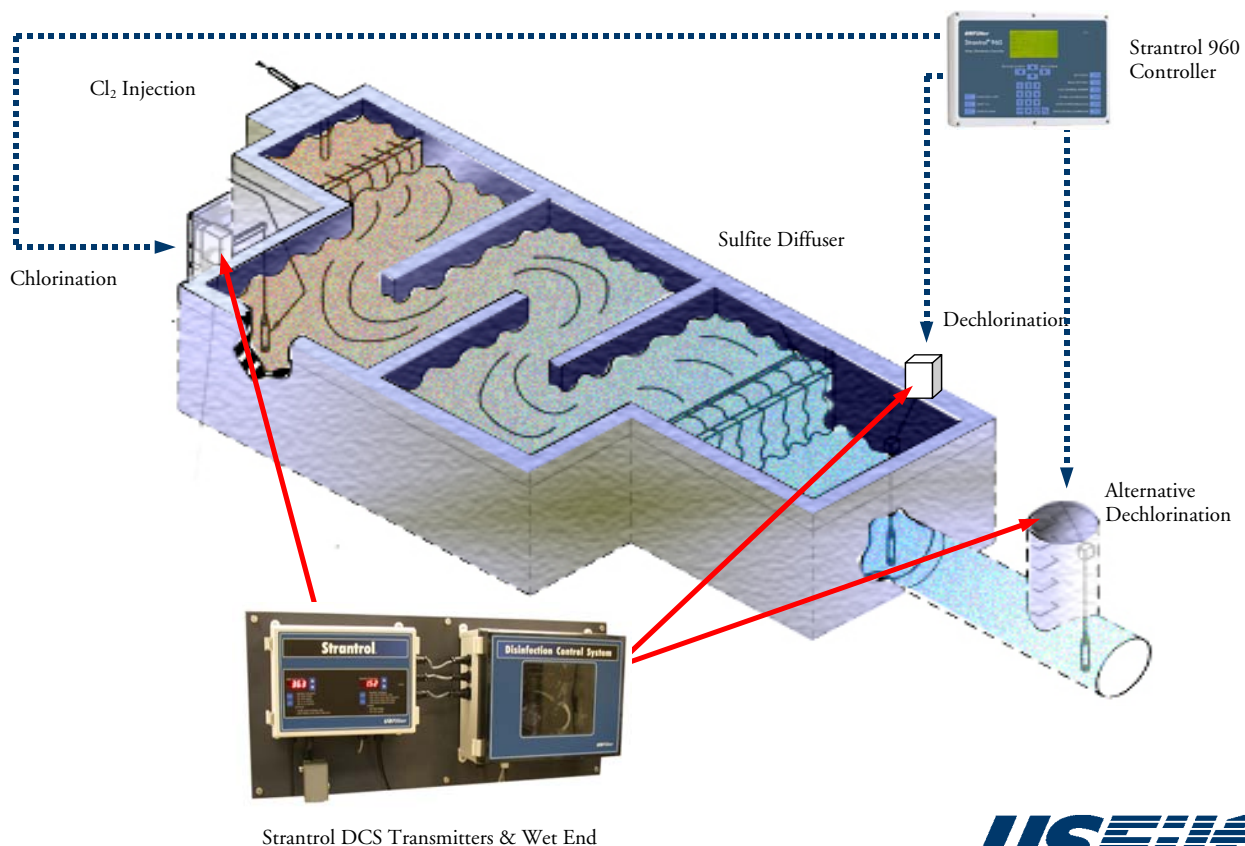
Data modem for remote computer connection (up to 19,200 baud)

WinSys 960 Windows® based software with remote control configuration, downloading and graphing capabilities.

## FACE PANEL DISPLAY

8-line x 40-character alpha/numeric back lighted LCD display provides detailed information, including sensor readings, setpoints, output levels and alarms. Display also prompts the operator through start up and adjustment of all features.

## TYPICAL WWTP INSTALLATION



## FACE PANEL MENU

**Display Access** Allows you to view set point, control output PPD, or %, pH/HRR/PPM input values and dosage rates and Flow (% or MGD).

**Operator Access** Change Setpoint  
Change % Output  
Auto/Manual Mode

**Technical Access** Full access to all program parameters. Custom tuning for specific applications.

**Representative Access** Full access to all program parameters. Custom tuning for specific applications, with additional capability to unlock and change Technical and Operator access codes.

## DIMENSIONS

### Electronics Cabinet

Polycarbonate UL NEMA 4X  
Outside Height 300mm (11.8")  
Outside Width 400mm (15.7")  
Outside Depth 180mm (7.1")  
Weight (10.0 lbs)

### Wet End Enclosure

Polycarbonate UL NEMA 4X  
Outside Height 400mm (15.7")  
Outside Width 500mm (19.7")  
Outside Depth 200mm (7.9")  
Weight (25.0 lbs)

### 960 Controller

Polycarbonate NEMA 4X  
Outside Height 24.5cm (10.0")  
Outside Width 35.56cm (14.0")  
Outside Depth 10.95cm (4.313")  
Weight 3.63kg (8.0 lbs)

### PVC Plate

Height 22" Width 48"  
Weight (15.0 lbs)