

EP200 Advanced Water Disinfection Automation System

Powered by *ePulse*[®]

New FSMA Preventive Controls

- ✓ Active Free Chlorine (ppm)
- ✓ Chlorine Dioxide (ppm)
- ✓ Peroxy Acetic Acid (PAA)
- ✓ ORP
- ✓ pH
- ✓ Flow
- ✓ Level
- ✓ Temperature
- ✓ Data Recording
- ✓ Data Reporting
- ✓ Built-in Alarm
- ✓ Alarm Notification
- ✓ Email

The Advanced EP200 is an essential “state of the art” tool for complete automation and management of the water treatment process. It provides multi parameter monitoring, pump and valve control, data recording and data reporting of all the processes. The EP200 uses real time monitoring with internet and network connectivity using Ethernet or WiFi. The EP200 measures Chlorine, Chlorine Dioxide, Peroxy Acetic Acid (PAA), First Step+ 10, pH, ORP or Conductivity. Modular design allows you to select any desired measurement options.

Monitoring and Control

Measurement and Control of various measurements with appropriate sensors. EP200 has 2 sensor inputs, 6 digital inputs, 2 analog outputs and 6 relay outputs. It includes Data Recording and ePulse Data Management. With analog input signals of 4-20 mA, a variety of measurements may be used such as ppm of active free chlorine (AFC), ppm of chlorine dioxide, chemical level for inventory management and flow rate and totalizing for monitoring water usage, etc. Digital input channels may be used for discrete inputs such as flow sensors, flow switches, and process interlocks.

Alarm

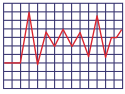
Built in safety alarms are used to interrupt and shut off chemical feed pumps and valves and create alarm notification. An alarm may be programmed on the upper and lower limits of any parameter. Functional timers may be programmed for safety interlocks, and to shut down or start up specific items. In the event of an alarm, an audio and visual strobe light turns ON, and a notification is transmitted by email for up to 8 email addresses.

Interlocks

Unique interlocks and advanced algorithms are applied to not allow certain functions to occur while another function is active. Typically, when Chlorine and Acid treatments occur, mixing of the two chemicals in the process can cause a dangerous and volatile reaction. If chlorine is added at a high acid low pH condition, it causes the chlorine gas to release which can cause irritation and worker hazard. The interlock function prevents the two chemicals from injecting together.

In order for chlorine to be active, it requires the pH to be in the optimum range between 6.5 and 7.5. If the pH is too high, the chlorine is inactive and ineffective, and the free chlorine (hypochlorous acid) level will be low. If acid and chlorine (sodium hypochlorite) are added together, it may cause a seesaw effect between acid and chlorine levels. Interlocks can prevent the two chemicals from injecting together.



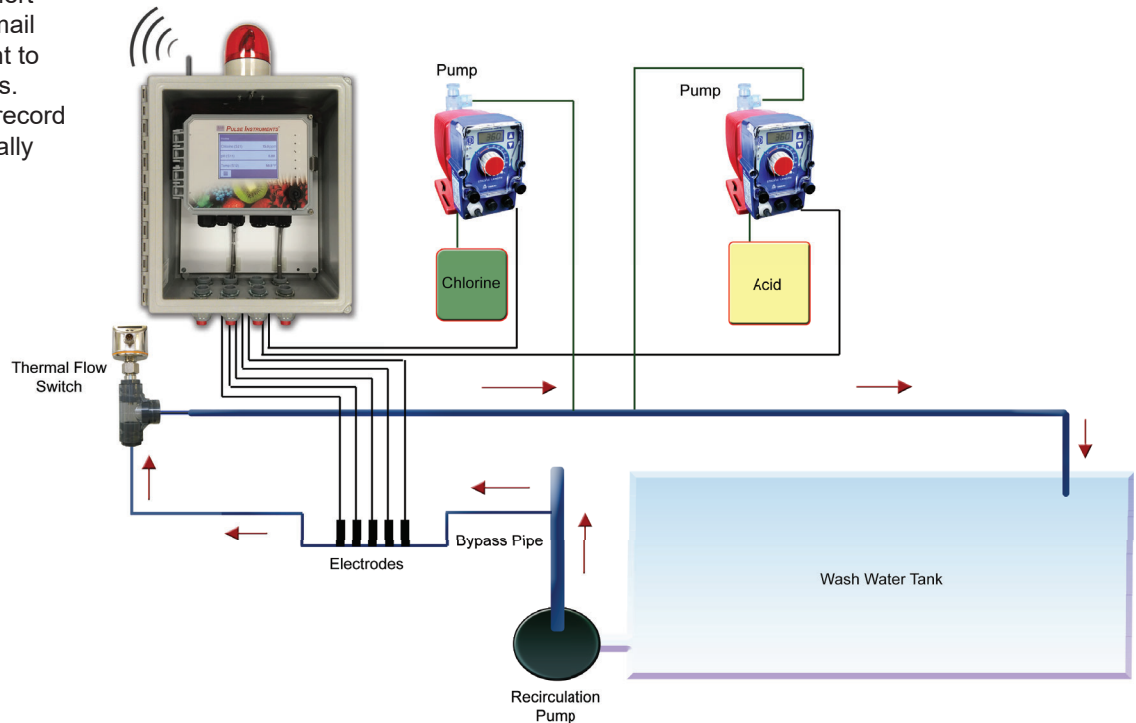


Tank Water Quality

The EP200 automatically refreshes the water tank and prevents build up of organic materials that may cause undesirable chloramines and trihalomethanes, which compromise chemical reactions and affect product quality and safety. Measurement of turbidity, total suspended solids or conductivity may be used to measure the build up of organic and inorganic materials. An output signal activates a relay to open a solenoid valve and drain some of the water out of the tank. As fresh water enters the tank, the water gets cleaner and the solenoid is automatically shut off, thus maintaining clean water.

Communication and Interface

User friendly menu selection provides easy set up of control and alarm points, data recording with access via Ethernet or USB connection. Ethernet connection, WiFi, or internet connection allows access via any web browser from anywhere. No proprietary software required. Alarm alert notifications are sent as email messages and may be sent to up to eight email addresses. Regularly scheduled data record file may be sent automatically via email.



Ordering Information

EP200-3	Controller with Two Direct Disinfection Sensor inputs with no secondary enclosure	\$2,900.00
EP200-X	Secondary Waterproof Enclosure, pre-mounted with Alarm light	\$950.00

Sensor Selection

EP-FC	Free Chlorine with a Selective Membrane sensor, 0-20, 0-200ppm	\$1,950.00
EP-CD	Chlorine Dioxide with a Selective Membrane sensor, 0-2, 0-20ppm	\$1,950.00
EP-PAA	Peroxy Acetic Acid with a Selective Membrane sensor 0 to 200 ppm	\$1,950.00
PFS10	First Step+ 10 Sensor and Membrane Kit with 20ft cable	\$2,250.00
EP-ORP	ORP Flat Surface Modular Electrode with Pre-amp and Ground	\$850.00
EP-PH	pH Standard Flat Surface Glass Electrode with ATC and Temperature	\$850.00
EP-PH2	pH Non-Glass ISFET Electrode with ATC and Temperature	\$1,650.00
EP-EC	Conductivity sensor with ATC and Fittings	\$850.00
EHE-FC	Chemical Injection Pump, Industrial Grade Waterproof	\$1,850.00
MF-FC06-05	Sensor Manifold with Digital Thermal Flow Switch and Injection	\$950.00