EP500
Advanced Automation

Chlorine Dioxide Monitoring and Control

- Chlorine Dioxide
- ORP
- pH
- Flow
- Level
- Temperature
- Monitoring
- Control
- Data Recording
- Data Reporting
- Built-in Alarm
- Alarm Notification Email and SMS

Powered by ePulse®

The Advanced EP500 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. EP500 uses real time monitoring with connectivity using Ethernet, WiFi and GPRS cell phone. The EP500 measures Chlorine Dioxide (ppm) ORP, pH, Flow Rate and Totalizer, Chemical Level and Temperature. Modular design allows you to select any desired measurement options.

Monitoring and Control

Analytical measurements of various water parameters provide critical and useful information that may be utilized for optimizing water treatment and proper disinfection. The EP500 has 4 direct sensor inputs which may be ORP, pH, TDS or Conductivity or may be any combination of these. With 8 analog input signals of 4-20 mA, a variety of measurements may be used such as ppm of chlorine dioxide, chemical level for inventory management and flow rate and totalizing for monitoring water usage, etc. 8 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 notifications. 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 up to 4 email addresses, and up to 4 text messages.

Communication and Interface

User friendly menu selection provides easy set up of control and alarm points, with data recording and access via Ethernet or USB connection. Ethernet connection, WiFi, GPRS cell modem internet connection allows access via any web browser from anywhere. No proprietary software required. Alarm alerts notifications are sent as text messages to four cell phones and Email may be sent to four addresses. Regular scheduled data record file may be sent automatically via Email.

FLOW PROPORTIONAL TREATMENT

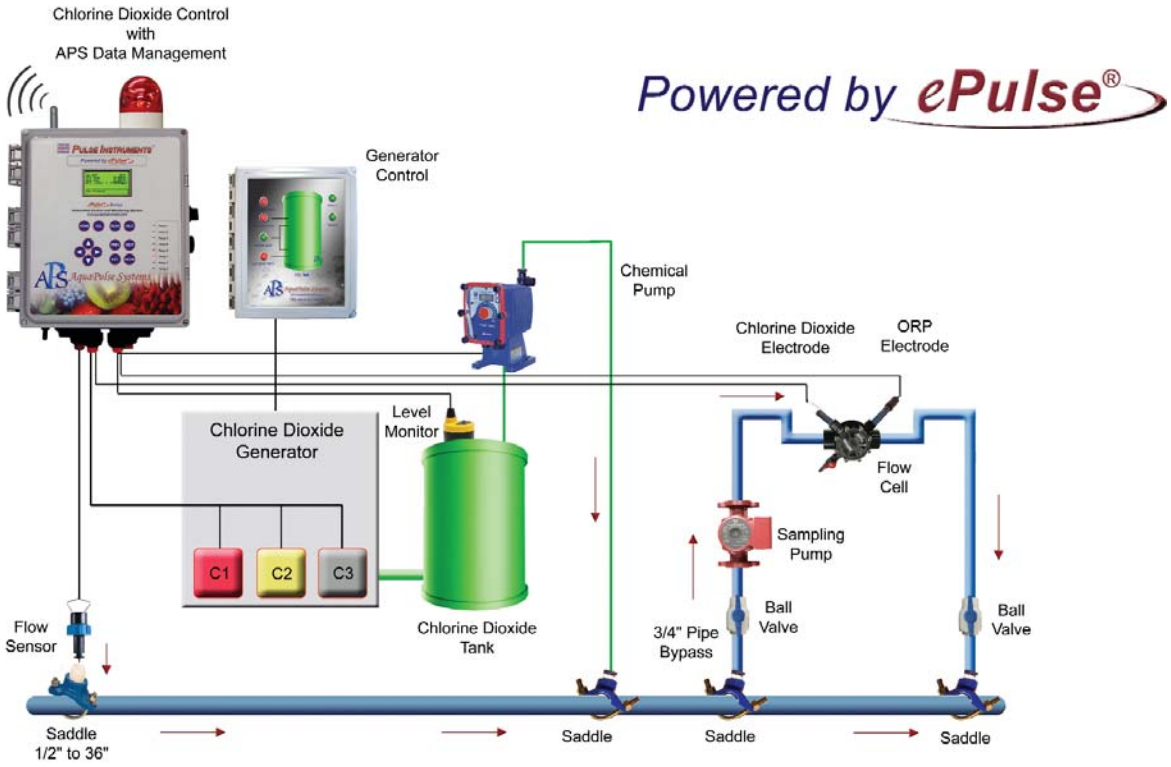
Single pass water systems that are not recirculating, may have varying water flow rates due to changing water demand and usage. A simple flow proportional system is used to provide consistent injection of chlorine dioxide, and maintain constant Water to Chlorine Dioxide treatment ratio.

System consists of:

Flow Sensor (paddlewheel or magnetic)
Flow Meter with proportional output
Proportional chemical injection pump
ORP or Chlorine Dioxide ppm sensor
Data logger or interface with EP500 or WebAlert

As water flows through the pipe, the flow sensor speeds up or slows down, and provides a proportional signal to the flow meter. The flow rate in gpm is displayed on the digital display, along with total amount of water in gallons. A signal, proportional to water flow rate is sent to the chemical injection pump that speeds up and slows down, depending on the flow rate. A consistent and precise concentration of Chlorine Dioxide produced by the generator is injected in to the water, which maintains a steady level of treatment in the water system at all times.

A downstream ORP or ppm sensor verifies the amount of treatment applied, and sends the signal to the data logger for recording. This is an essential component of the treatment process as it may be used for treatment verification, optimization, improve efficiency, and provide useful information about the water quality. Charts, graphs and reports help improve our understanding of the water treatment, and used to confirm that proper treatment was applied at all times.



C16

Portable Chlorine Dioxide Gas Monitor

C16 portable gas detector is a versatile tool for performing regular checks in and around processing area and piping, or in confined spaces prior to entry. Designed for easy one-hand operation, the C16 contains an internal sample pump and a flexible sampling wand to pinpoint location of the source of leakage. A large display ensures that measured values are easily visible, and a back-light allows readability in low light conditions.

A unique feature of the C16 detector is its ability to measure the gas by simply inserting the appropriate sensor for that gas. This means that one detector can be used to measure over 30 different gases or vapors, reducing the need to purchase individual detectors for each type of gas. Sensors can be changed quickly and easily, without the need for calibration when a sensor change is made. Sensors used are our newest miniaturized smart sensor modules. Each sensor module is actually a sensor, amplifier, and memory module in one compact package. The C16 is equipped with an RS-232 output which allows stored data to be downloaded to a PC through an interface cable and software that is supplied with the unit. A software package is included with the unit to facilitate data transfer.

C16-1004 Portable chlorine dioxide gas monitor with chlorine dioxide gas sensor.

F12

Continuous Chlorine Dioxide Gas Monitor

F12 is designed for ambient gas monitoring in all kinds of industrial environments: storage areas, compressor rooms, process piping galleries, chemical process areas, and more. In fact, the F12 transmitter can be used almost anywhere that gas conditions might develop through natural buildup.

The sensing modules consist of an electrochemical gas diffusion sensor and a solid state memory assembly. Developed and manufactured exclusively, our electrochemical sensors provide excellent response time, maximum selectivity, and superior temperature stability for reliable gas sensing in a wide range of environments. Internal memory stores operational information and calibration constants, along with gas sensor identification, sensing module range, and software revision level. Complete sensing modules are housed in convenient snap-in packages that mate easily with F12 transmitters.
This unique combination of sensor and memory lets you calibrate sensing modules with any transmitter.

F12-1004 Continuous chlorine dioxide gas monito with chlorine dioxide sensor.

PI50-65

Chlorine Dioxide Monitor & Controller

Unique membrane covered polarographic sensor does not require any chemical reagents. A constant water flow across the face of the sensor in a flow cell provides a steady and accurate measurement.

Display:	0 – 2; 0 - 20; 0 – 200 ppm
Accuracy:	0.02 ppm or 0.5% F.S.
Power:	16 – 35 VDC for loop power 115/230 VAC, 50/60 Hz
Control:	Relays Two SPDT; 6A
Relay:	Programmable for control or alarm
Analog:	Two assignable 4-20 mA.Output

Polarographic Membrane Sensor with flow cell

PI50-65 Chlorine Dioxide Monitor & Controller 2 relays with dual 4-20mA output.

CL6501 Polarographic membrane sensor with a constant head flow cell.

CL3630X

Chlorine Dioxide Monitor

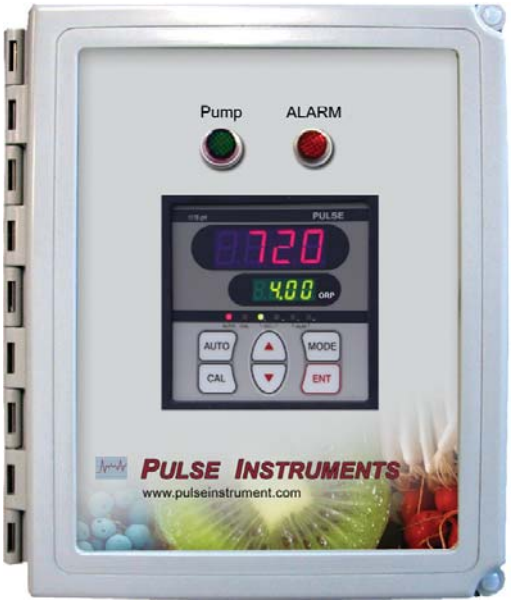
- Simple to operate
- Digital display readout
- Isolated 4-20 mA output suitable for data acquisiton, proportional control, and others
- Selectable scale: 0-1.999, 0-19.99(mg/l)
- NEMA 4X Enclosure

Chlorine Dioxide Monitor in NEMA 4X Enclosure with 4-20mA output. Selectable scale: 0-2.0, 0-20, 0-200 ppm. Chlorine Dioxide Monitor only. For complete system installation select Chlorine Dioxide sensor, Sensor flow cell, and flow switch

Teflon Reference Junction, double Pt disc

CL3630 Chlorine Dioxide Monitor.

PICL500 Chlorine Dioxide Sensor with double Pt disc.



170SE-ORP

ORP Monitor & Controller

170SE-ORP monitor and controller has four set point version with Chlorine Dioxide control. Two for control, two for alarm, and takes a direct input from an ORP electrode. Built in error diagnostics confirm calibration, electrode cleaning, replacement and function.
Dual display indicates current set point on the lower display and current measurement in the upper display. Push button autocalibration, diagnostic messages, push button set point selection, adjustable 4-20 mA output, adjustable hysteresis (dead band) and compact design makes this a unique instrument with exceptional value. 170SE-ORP is supplied with BNC connector on the bottom, 110VAC power cord and an ON/OFF switch. Duplex receptacles allow quick pump/valve connection.

170SE-ORP ORP Monitor & Controller with BNC connector and adjustable 4-20mA output.

DL14

Ultrasonic level sensor

EchoPod is an innovative level sensor that replaces floats, conductance and pressure sensors that fail due to dirty, sticking and scaling media in a small tank 49.2" or less. EchoPod is a non-contact sensor and switch, controller and transmitter. Combining 4 relays, 4-20 mA output and pump/valve control in one small sensor allows EchoPod to be maintenance free. It reduces tank system hardware through simplicity and consolidation. Additionally, EchoPod is well suited for corrosive and dirty applications with its non-metallic housing and transducer. EchoPod provides a total solution for fluid handling and automation. EchoPod also utilize WebCal, an innovative PC user inter-face that provides fast and accurate configuration.

DL14 Ultrasonic Level Switch, Controller and Transmitter, 4-20mA.

5870051

Chlorine Dioxide Pocket Colorimeter Kit

The new Pocket Colorimeter™ II Filter Photometer is a true go-anywhere instrument, lightweight and battery operated, suitable for extended field work or quick, on-the-spot process monitoring.

Chlorine Dioxide Colorimeter Kit

Automatic Reagent Dispenser with 250 test cartridge

5870051 Pocket Colorimeter II Analysis System, Chlorine Dioxide, 0.05 to 5.00 mg/L, with reagent set (100 tests), manual, and carrying case. USEPA approved / accepted for drinking water.

2802300 Chlorine Dioxide Reagent Swiftest™ Dispenser; 10ml sample; 250 tests.

ORPH-07

Portable ORP & pH Meter Kit

- Easy user friendly 3-button function
- High Accuracy
- Bright, backlit LCD display with ready indication
- Automatic or manual calibration

This waterproof, battery-operated ORP & pH meter stands up to the most demanding field applications and delivers over 2,000 hours of continuous operation. Featuring automatic or 1 to 5 point manual calibration, the rugged meter offers a full complement of GLP-related features. You can record and store up to 10 setup parameters and calibrations - a valuable feature for fast measurements in the field.

ORPH-07 Portable ORP & pH Meter Kit. Includes: Meter, Case, pH and ORP Electrodes, Calibration standards.