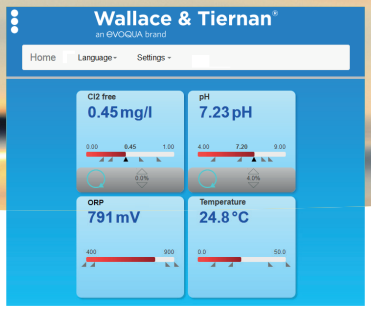
EVOQUA WATER TECHNOLOGIES

LENNTECH WATER TREATMENT SOLUTIONS



WEB VIEW EXAMPLE

DEPOLOX® POOL COMPACT CONTROLLER

WALLACE & TIERNAN® ANALYZERS/CONTROLLERS

The DEPOLOX® Pool Compact controller is a state of the art disinfection controller that measures the pool water free chlorine concentration, temperature, conductivity as well the ORP and pH values. The controller provides chemical feed outputs to a variety chemical feed devices to control the disinfection parameter of either free chlorine or ORP as well as a chemical feed output to maintain the pH value and the conductivity at the desired setpoints.

DESIGN AND FUNCTION

The system comprises of a pressurized flow cell, accommodating up to four sensors and state of the art electronics. The flow cell permits visual checks of the sample water flow as well as the free chlorine, ORP and pH sensors. The integral "Multi-Sensor" continuously monitors the sample water flow, measures the sample water temperature and includes a large water ground to protect against electrical noise. The flow control valve guarantees a constant sample water flow and quartz grit enables hydro mechanical cleaning of the free chlorine sensor for long term measurement stability. The flow cell includes an LED light stick which indicates the pool water chemistry status from a distance.

The electronics includes an intuitive user interface via its 4" glass panel color touch display making setup and operation of the controller much easier when compared to conventional LED displays. Various controller outputs, alarm contacts and five digital inputs are standard. Four 0/4 – 20 mA outputs are available as an option. Six freely assignable relay contacts are also available that can be configured as chemical feed outputs or alarm contacts. In addition the following safety functions are built-in: alarm and chemical feed interruption triggered by the sample water flow switch; alarm and chemical feed interruption in case of circulation pump failure; shutdown in the case of supply-tank-empty-alarm; dosing time monitoring and dosing

Benefits:

- 4,3" color touch screen for truly intuitive operation with shatterproof glass panel
- Integrated web views: visualization and operation of relevant parameters from up to four pools via web enabled devices and standard browsers
- Modern communication via RS 485, USB and Ethernet interface, Modbus TCP communication integrated
- Integrated safety functions
- LED lit flowcell with alarm status via color change

Pre-configured systems include:

- chlorine/pH
- chlorine/pH with 4 mA outputs
- chlorine/pH/ORP
- chlorine/pH/ORP with 4 mA outputs
- retrofit kits for ORP measurement and 4 mA outputs

time delay. The plug-in sensors, the pre-wired sensor cables and the modular mounting provide for fast and simple installation, start-up and maintenance of the system.

ELECTRONIC MODULE MEASUREMENT INPUTS

Free chlorine:

Rugged 3-electrode chlorine sensor with sealed electrolyte KCl supply. Potentiostatic 3-electrode amperometric design; Measuring range 0 to max 10 mg/l, adjustable 1, 2, 3, 5 and 10 mg/l; Resolution: 0.01 mg/l; Temperature compensation 0 – 50 °C; Sensor plug connection IP 67

pH value:

Measuring range 0 to 14 pH, start of range adjustable from 0 to 6, end of range adjustable from 8 to 14 pH, scale freely selectable in 1 pH increments; Resolution 0.01 pH; Temperature compensation 0 – 50 °C
Sensor plug connection IP 67

ORP:

Measuring range 0 to 1000 mV; start of range from 0 to 400 mV, end of range from 500 to 1000 mV, Scale freely selectable in 100 mV steps; Resolution 1 mV; Sensor plug connection IP 67

Conductivity:

Robust 4 electrode measuring cell with integrated temperature sensor; Measuring ranges: 500/1000/2500 µS/cm or 5.00/10.0/20.0/50.0/100.0/200.0/300 mS/cm, Temperature compensation 0 - 50 °C, plug connection

Multi-sensor:

- Measurement of sample water temperature by Pt 1000 sensor
- Large stainless steel water ground to protect against external electrical noise

Display:

4.3 inch capacitive colour touchscreen with backlight

Digital inputs:

1 x assigned to sample water flow switch , 4 x freely selectable, e.g. chemical tank empty, external stop

Output contacts:

6 x freely selectable alarm contacts/general alarm signal as well as controller outputs for free chlorine, or ORP as well as pH

Relay status is depicted on the operating display
max. 5 A/250 V AC, 0.2 A/220 V DC

Analog outputs (optional):

4 x 0/4 – 20 mA, freely configurable
Load protected ≤ 500 Ohm, Accuracy < 0.5 % FS
Galvanically isolated up to 50 V relative to earth

Power supply: 100 - 240 V AC± 10 %, 50 – 60 Hz
Ambient temperature: 0 – 50 °C

Enclosure: IP 66

Certfications: CE, CSA
Dimensions (W x H x D):
320 x 311 x 135 mm (12.5 x 12 x 5 inches)

Weight (incl. packing): approx. 5 kg (11 lbs)

FLOW CELL MODULE

Flow control valve:

- Controlled sample water flow: 33 l/h
- Control range 0.2 – 3.0 bar at valve inlet (3 – 43 psig)
- Maximum back pressure: From pressureless up to 1.5 bar at valve outlet (0 to 22 psig)
- Maximum sample water temperature: 50 °C
- LED alert (white, yellow and red)

Additional features:

- Isolating valves at sample water inlet and outlet of the flow block module in pressurized design
- Ball check valve at sample water inlet
- Simple cell drain assembly
- Integrated fitting to hold sensor during calibration

Sample water connections:

PVC hose 6 x 3 mm or PE hose 6 x 1 mm
Tubing connectors on 1/2 " union

Weight (incl. packing): approx. 2.5 kg (5.5 lbs)
Dimensions (W x H x D):
253 x 375 x 163 mm (10 x 15 x 6 inches)

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LENNTECH
Water Treatment Solutions
info@lenntech.com Tel. +31-152-610-900
www.lenntech.com Fax. +31-152-616-289

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