



**Winner of the WEX 2014
aqualia Innovation Award**

ASP-CON

The ASP-CON provides continuous data to maximize the efficiency of your activated sludge plant.

The many automated processes performed by a single ASP-CON replace time-consuming and sporadic collection and analysis of grab-samples.

Built-in communication capabilities can directly control processing, or channel data to your control system for previously unattainable processing efficiency.

COMPLETE SLUDGE PLANT CONTROL

Like having your best operator on-hand
24/7.

The Activated Sludge Plant Controller, (ASP-Con) provides continuous process analysis for unprecedented process control in aerobic wastewater treatment.

ACTIVATED SLUDGE PLANT CONTROL



See a working ASP-Con
tinyurl.com/aspcon



ASP-CON TECHNICAL SPECIFICATIONS

Self-Cleaning / Self Calibrating Multi-Sensor

Weight

Stand alone apparatus ~30 lbs
 Mounting bracket ~35 lbs

Voltage Supply 120 VAC (Internal 24VDC)

Operating Temp range

Low -13°F
 High 104°F

Dissolved Oxygen - LDO

Two sensors for simultaneous respirometry and D.O.
 Range: 0 - 100% Saturation
 Response, Respirometer T90 = 15 seconds
 Response, In-Basin T90 = 120 seconds

Ammonium (Single ISE electrode)

Range: 0 - 100mg/L
 Response: T90 = 50 seconds

Potassium (Single ISE electrode)

Range: 0 - 50mg/L
 Response: T90 = 50 seconds

Nitrate (alternative to ammonium)

Range 0 to 10,000 mg/L
 Response 100ppm change in 60 sec.

Solids Measurement Sensor

Transmitted and Reflected light sensor
 Range: 0 - 24,000 mg/L
 Response: T90 = 0.2 seconds

pH Measurement (Single Glass)

Range: 0 - 14
 Response: T95 = 30 seconds
 Reference Electrode: Teflon single junction

ORP (alternative to pH electrode)

Range -500 to +500
 Response T90 60 seconds

External communications

- ▲ Dual PID loop controller in Display unit with two 4-20mA outputs
- ▲ RS485
- ▲ Zigbee wireless
- ▲ Modbus protocol

MEASUREMENT CAPABILITY

- ▲ Ammonium or Nitrate
- ▲ Dissolved Oxygen
- ▲ Solids MLSS
- ▲ Settlement Test
- ▲ SVI / SSVI of settlement test
- ▲ TSS of settlement supernatant
- ▲ Oxygen Uptake Rate
- ▲ Specific Oxygen Uptake Rate
- ▲ Carbonaceous bacteria % and health
- ▲ Nitrification bacteria % and health
- ▲ Critical Carbonaceous DO
- ▲ Critical Nitrification DO
- ▲ Potassium
- ▲ pH or ORP
- ▲ Toxicity

OPERATOR SELECTABLE VARIABLES

- ▲ Settlement test frequency
- ▲ OUR / SOUR test frequency
- ▲ Toxicity check frequency
- ▲ Cleaning frequency
- ▲ DO Calibration frequency
- ▲ ISE electrode calibration frequency
- ▲ Sludge health test frequency
- ▲ % Nitrification frequency
- ▲ Critical Carbon DO frequency
- ▲ Critical Nitrification DO frequency



LIQUID ANALYTICAL RESOURCE

Liquid Analytical Resource, LLC

1701 Creek Road, Suite D
 West Bend, WI 53090
 Phone: 262-429-1310
 Fax: 262-429-1313
 email: marketing@larllc.com



Strathkelvin Instruments

Rowantree Avenue
 Newhouse, Scotland ML1 5RX
 +44 (0) 1698 730 400
info@strathkelvin.com
www.asp-con.com - www.strathkelvin.com