

PA80 Peracetic Acid Analyzer



ELECTRO-CHEMICAL DEVICES

Features

- **Panel Mounted System Plumb and Play Design**
- **Multiple PAA ranges**
- **Automatic Flow Control**
- **T80 Transmitter Capability**
- **pH measurement for added process information**

Benefits

- **Complete System, Easy Installation, Ready to Use**
- **0-20, 0-200, 0-2000 ppm**
- **Eliminates Pressure Regulators and Rotameters**
- **Dual Measurements, Single parameter or Dual parameter Displays, MODBUS RTU, Spray Cleaner (optional for fouling applications)**



Model PA80
Peracetic Acid Analyzer

Description

The PA80 is a panel mounted, ready to use peracetic acid (PAA) analyzer. Peracetic acid is a colorless liquid with a characteristic pungent odor similar to vinegar. PAA is produced by a reaction between hydrogen peroxide and acetic acid and is typically supplied as an equilibrium solution of the three with a concentration between 5-15%. It is a strong oxidizer, stronger than either chlorine or chlorine dioxide.

Peracetic acid is widely used in the Food and Beverage, Pharmaceutical and Medical industries as a cleaner and sanitizer of process equipment, medical instruments and for bottle washing. It is also widely used as a disinfectant in cooling towers and municipal waste water treatment plants. PAA is a highly effective bactericide that does not form any harmful Disinfection By Products (DBP) like many chlorine products do. It decomposes naturally into acetic acid and water and does not form a residual that has to be removed from the treated water before it is released to the environment.

The PA80 features a plug and play design that incorporates a constant head flow control device, a pH sensor, a peracetic acid sensor and the T80 analyzer/

transmitter conveniently mounted on a PVC panel. Simply connect the sample and drain lines, connect the power and outputs and it is ready to use. Calibration is accomplished by a grab sample comparison.

The T80 is 110-240 VAC or 24 VDC powered and allows either parameter to be graphically displayed with user defined Line, Bar or Guage style graphs. The standard configuration has (2) 4-20 mA outputs, (3) alarm relays and MODBUS RTU.

Amperometric PAA sensors are flow sensitive, the minimum required flow by the sensor is 0.5 ft/sec, above this value the output is virtually flow independent. A "Constant head" Flow control Device (CFD) maintains the optimum flow past the sensor over a wide range of incoming sample flow rates. The minimum flow required for the CFD is 10 gal/hr and the maximum flow is 80 gal/hr with the sample going to drain at atmospheric pressure.

The Auto Clean option includes a solinoid actuated spray cleaner that uses either 30 psi process water or air. An easily adjusted timer controls the period and duration of the cleaning cycle.

PA80 Peracetic Acid Analyzer

Specifications

Sensor and Flow Train

Sensor

Polarographic, Gold/Silver, micro-porous membrane, Digital communication

Measurement Range

PAA: 0.00 to 200 ppm

0.0 to 2000 ppm

pH: 0 to 14 pH

Operating Temperature

0° C to 50° C (32° F to 122° F)

Min/Max Flow

38 L/hr to 300 L/hr (10 gal/hr to 80 gal/hr)

Wetted Materials

PVC, PP, PVDF, PTFE, Glass, 316 SS

Process Connections

Input 1/4" barb fitting (1/4" FNPT), Drain 3/4" FNPT

Response Time

T90 in 2 minutes

Electrolyte Life

Up to 12 months

T80 Analyzer/Transmitter

Measurements

PAA: 000.0 to 999.9 ppb, ppm auto ranging

pH: 0 to 14 pH

Temperature: 0° C to 100° C (32° F to 212° F)

pH Compensation

none, measurement degrades above pH 8

Display

128 x 64 pixels (2.75" x 1.5") LCD, Black on Grey background, Blue on White background with LED backlight

Enclosure

IP65, weatherproof, 1/2 DIN, (L x W x D) 5.7" X 5.7" X 3.5"

Outputs

(1) 4-20 mA fo rPAA, set to Sensors Range

(1) 4-20 mA for pH (Optional) , set 0-14 pH

Alarm Relay Ratings

Three (3) SPDT, 1 form C, 250 VAC, 10 Amp

Input Power

Code -1 24 VDC (18-36 VDC @ 250 mW minimum)

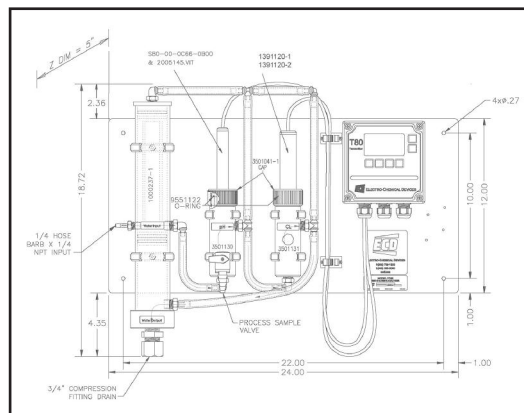
Code -2 100-240 VAC, 50/60 Hz, 4W, protected with

250V, 1A, Slow Blow fuse



Part No.	Model and Product Description
PA80-01-2200	Peracetic Acid Analyzer (PA80), complete, 0.00-200 ppm, 100-240 VAC
PA80-01-2210	Peracetic Acid Analyzer (PA80), complete, 0.00-200 ppm, with spray cleaner, 100-240 VAC
PA80-11-2200	Peracetic Acid Analyzer (PA80), complete, 0.0-2000 ppm, 100-240 VAC
PA80-11-2210	Peracetic Acid Analyzer (PA80), complete, 0.0-2000 ppm, with spray cleaner, 100-240 VAC

Part No.	Spare Parts and Accessories Description
1391120-1	PAA Sensor, 0.00-200 ppm
1391120-2	PAA Sensor, 0.0-2000 ppm
1000273-1	Membrane Replacement Kit with electrolyte
S80-00-0C66-0B00	pH Sensor, 316L SS body with Flange, 4' cable
2005145.VIT	Replacement pH Cartridge
3501131	PAA Flow Cell
3501130	pH Flow Cell
3501041-1	Flow Cell Threaded Cap



Specifications subject to change without notice.

Represented by:

Electro-Chemical Devices

1500 North Kellogg Dr.

Anaheim, California, USA 92807

Phone: +1-714-695-0051

+1-800-729-1333

Fax: +1-714-695-0057

email: sales@ecdi.com

web: www.ecdi.com

