

Peracetic acid (PAA) is an extremely strong oxidizer widely used in the food industry for disinfection of piping systems and processing equipment. It is also used for spray washing of food products, and for disinfection of cooling water systems. As a disinfecting agent, PAA is often preferred because it produces no harmful breakdown products.

As with any disinfection system, maintaining proper residual values is the key to effective pathogen control. To facilitate reliable chemical feed control, ATI has developed an on-line monitor capable of providing real time measurement of low levels of PAA in solution. The Q45/85 Peracetic Acid Monitor uses a direct sensing polarographic probe mounted in a flowcell to measure PAA residuals in a flowing water stream. A permeable diffusion membrane isolates the sensing electrodes from the measured sample, providing long-term stability without electrode fouling problems. The measurement is selective for PAA, and is not affected by changes in hydrogen peroxide in solution.



Features



- Available in AC powered, battery powered, or 2-wire loop-powered versions
- Real time PAA measurements suitable for chemical feed control
- Standard PID control output
- Second analog output plus two alarm or control relays on AC powered units
- Large, easy to read LCD display with LED back-light
- Display ranges of 0-20, 0-200, or 0-2000 PPM operator selectable
- Direct reading PAA sensor requires minimal maintenance
- Nema 4X (IP-66) electronic packaging suitable for wall or panel mounting

Q45/85 Specifications

Measurement Type:	Peracetic Acid (PAA) $C_2H_4O_3$
Sensor Type:	Amperometric membraned cell
Range:	0-20.00 PPM Minimum, 0-2000 PPM Maximum
Display:	Large Character LCD with LED back-light
Response Time:	90% in 150 seconds
Accuracy:	± 0.5 PPM or 2% of Full Scale
Sensitivity:	0.01 PPM Minimum
Zero Stability:	± 0.2 PPM per week
Electronic Linearity:	$\pm 0.5\%$
Span Drift:	Generally less than 5% per month (Application dependent)
Analog Outputs:	2-Wire Version: One isolated 4-20 mA, 575 ohms maximum AC Versions: Two isolated 4-20 mA, 575 ohms maximum Battery Version: Two 0-2.5 VDC, 200K Minimum input impedance
Power:	24 VDC for 2-Wire Version 115 or 230 VAC, 50/60 Hz., 5 VA max. Two AA Cells for battery-powered system
Alarm Relay:	Two SPDT, 5 A @ 230 VAC resistive
Relay Coil:	Programmable either normally energized or normally de-energized
Enclosure:	Nema 4X Polycarbonate, wall or panel mount
Controls:	4 membrane switches on front of monitor
Operating Temperature:	0° to +50° C
Sample Inlet:	¼" I.D. hose barb
Sample Drain:	½" I.D. hose barb
Recommended Sample Flow:	6 -15 GPH (0.4 – 1.0 LPM)
Weight:	5 lbs. (2.3 Kg.)

Ordering Information Model Q45/85-A-B Peracetic Acid Monitor

Suffix A: Power
1 – 24 VDC, 2-wire (Single Output Only)
2 – 115 VAC with 2 Relays & 2 4-20mA Outputs
3 – 230 VAC with 2 Relays & 2 4-20mA Outputs
4 – Battery operated with two 0-2.5 VDC Outputs
5 – Battery operated with internal data logger

Suffix B: Sensor Type
1 – Sensor with constant-head flowcell and 25ft. cable
2 – Sensor with sealed flowcell and 25ft. cable



Q45/85 Options

07-0100 NEMA 4X junction box
31-0038 Sensor interconnect cable (max. 100 ft.)
47-0005 2" U-bolt, 304SS
05-0068 Panel mount bracket kit