Call **800.959.0299** to speak with a sales representative or visit us on the web at **www.analyticaltechnology.com** 

# **Peracetic**Acid Transmitter





#### **Model Q45/85**

Peracetic Acid (PAA) is an extremely strong oxidizer that is 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 disinfection by 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 Transmitter 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.

## **Applications**

Egg Washing Systems Ground Water Decontamination Oil & Gas Recovery Systems Wastewater Treatment Bleaching Systems Cooling Towers Cleaning

#### **Features**

- · Low maintenance membraned sensor
- Loop-powered or battery-operated
- External 5-17 VDC version for solar power applications
- Interference-free measurement
- Measurement from 0-20 ppm to 0-2000 ppm or mg/l
- Constant-head flowcell simplifies operation
- Sealed flowcell option for recirculation systems
- Large, easy-to-read LCD display
- · Clear, menu-driven user interface
- NEMA 4X (IP-66) enclosure
- · Wall or pipe mounting bracket standard
- Built-in PID controller

# **Sensor & Flowcell Options**







Constant Head Flowcell



Submersible Sensor



# Model Q45/85 **SPECIFICATIONS**

#### **ELECTRONIC TRANSMITTER**

	LECTIONIC INVINS	***************************************
	Display Range	0-20.00, 0-200.0, 0-2000 ppm or mg/l
	Accuracy	0.5% of selected range or 0.02 ppm
	Repeatability	0.3% of selected range or 0.01 ppm
	Sensitivity	0.05% of selected range
4	Linearity	0.1% of selected range
	Temperature Drift	0.1% of span/°C
	Sensor Type	2E Amperometric (Polarographic) membraned sensor
	Temperature Input	Pt100 in sensor for temperature compensation
	Power	2- Wire unit: 17-30 VDC, 25 mA maximum Battery unit: Two AA Alkaline batteries External DC: 5-17 VDC, 10 mA maximum
	Analog Outputs	2-Wire unit: Single 4-20 mA DC, 450 ohms maximum Battery unit: Two 0-2.5 VDC, 50K ohms minimum External DC: Two 0-2.5 VDC, 50K ohms minimum
	Output Isolation	600 V Galvanic isolation
	Enclosure	NEMA 4X (IP-66) Polycarbanate, V-0 flammability
	<b>Mounting Options</b>	Wall or pipe mounting bracket supplied
	Conduit Entries	Two PG-9 cord grips, 0.16-0.31" diameter cable
	Ambient Temperature	Operating: $-40^{\circ}$ to $+60^{\circ}$ C Storage: $-40^{\circ}$ to $+70^{\circ}$ C
	Ambient Humidity	0-95%, Non-condensing
	Size	4.4"H x 4.4"W x 3.5"D (111 x 111 x 90 mm)
	Weight	<b>2-Wire or External DC unit:</b> 1 lb (0.45 Kg) <b>Battery unit:</b> 2 lbs (0.9 Kg)
	Certifications	CE marked to BS EN 61326-1:2006 Standard UL and CSA General Purpose

#### SENSOR & FLOWCELL SPECIFICATIONS

PAA Sensor	Membrane-covered amperometric (Polarographic)
Materials	PVC & 316 stainless steel
Response Time	90% in 60 seconds
<b>Temperature Limits</b>	0-50°C
Pressure Limit	0-50 psig
Sensor Cable	25 feet (7.5 m) standard
Sensor Flowcell	Clear acrylic constant-head overflow or sealed acrylic flowcell
Sample Flow rate	7-15 GPH (0.5-1.0 LPM)

#### ORDERING INFORMATION

Model 045/85-A-B Peracetic Acid Transmitter

#### Suffix A - Power

- 1 24 VDC, 2-wire (single output only)
- 4 Battery operated with two 0-2.5 VDC outputs
- 5 External 5-17 VDC with two 0-2.5 VDC outputs

#### Suffix B - Sensor Style

- 1 Sensor with constant head flowcell and 25' cable
- 2 Sensor with sealed flowcell
- 3 Submersible sensor with 25' cable

#### **ACCESSORIES**

07-0100 Universal junction box, NEMA 4X

**31-0038** Sensor interconnect cable, maximum 100 ft.

**00-0572** Sensor Polarizer, flow cell style

**47-0005** 2"U-bolt, 304SS

**55-0057** Fixed flow regulator, 400 cc/min., 1/4" inlet & outlet, viton

#### **NOTES:**

- **1** All systems are supplied with one package of membranes, one 120 cc bottle of electrolyte, and one spare parts kit containing 3 each of all o-rings and special screws.
- **2** Flowcell for systems should be kept within 25 feet of monitor.
- **3 -** For 1/2 DIN panel mount, select option 07-0201.
- 4 Pipe mount requires two 2" U-bolts (47-0005).

## **Short Term PAA Data Logger**

Model PQ45: Portable PAA Monitor

The perfect solution for temporary monitoring from a few days to a few weeks!





PQ45 Portable PAA Data Logger





Visit Us on the Web: www.analyticaltechnology.com

**Analytical Technology, Inc.** 6 Iron Bridge Drive

Collegeville, PA 19462 **Phone** 610.917.0991 **Toll-Free** 800.959.0299

**Fax** 610.917.0992 **Email** sales@analyticaltechnology.com

## Analytical Technology

Unit 1 & 2 - Gatehead Business Park Delph New Road, Delph Saddleworth OL3 5DE Phone 01457 873 318 Fax 01457 874 468 Email sales@atiuk.com Represented by: