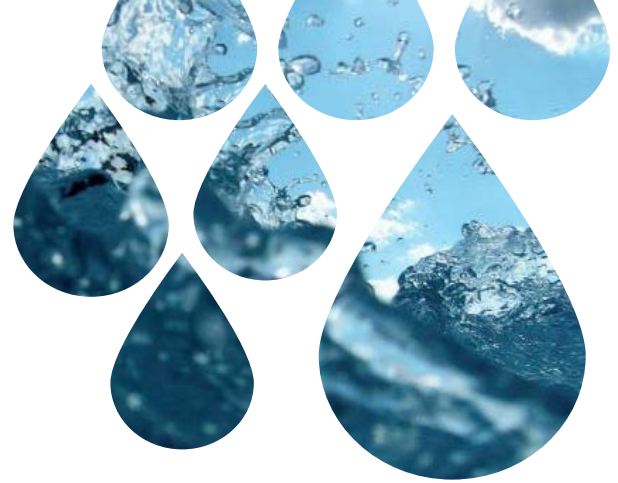


Call [800.959.0299](tel:800.959.0299) to speak with a sales representative or visit us on the web at www.analyticaltechnology.com



Hydrogen Peroxide Transmitter



Model Q45/84

ATI's Hydrogen Peroxide (H_2O_2) Transmitter is an extremely strong oxidizer which is widely used in bleaching applications in the paper industry and is sometimes added to water systems for the purpose of disinfection. In addition, it is used in wastewater collection systems to remove Hydrogen Sulfide that destroys concrete pipe and manhole structures. Peroxide applications in aqueous systems, like most chemical treatment processes, function most efficiently with accurate measurement and control.

In order to facilitate the control of aqueous Hydrogen Peroxide feed systems, ATI has developed an on-line monitor capable of providing real-time measurement of low levels of dissolved H_2O_2 in solution. The Dissolved Hydrogen Peroxide Monitor uses a direct sensing polarographic probe mounted in a flowcell to measure H_2O_2 in a flowing water stream. A Peroxide permeable diffusion membrane isolates the sensing electrodes from the measured sample, providing long-term stability without electrode fouling problems. The measurement is selective for Peroxide and does not respond to most other chemicals in solution.

Applications

| | |
|-----------------------|-------------------------|
| Food Wash Water | Iron Oxidation Systems |
| Free Chlorine Removal | Bleaching Systems |
| Cooling Towers | Potable Water Treatment |
| Odor Scrubbers | |

Features

- Low maintenance membraned sensor
- Loop-powered or battery-operated
- External 5-17 VDC version for solar power applications
- Interference-free measurement
- Measurement from 0-2 ppm to 0-200 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



Sealed Flowcell



Constant Head Flowcell

Model Q45/84 SPECIFICATIONS

ELECTRONIC TRANSMITTER

| | |
|----------------------------|--|
| Display Range | 0-2.000, 0-20.00, 0-200.0 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 | 0.5% of selected range |
| Linearity | 0.1% of selected range |
| Temperature Drift | 0.01% of span/°C |
| Sensor Type | 3E 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) Polycarbonate, V-0 flammability |
| Mounting Options | Wall or pipe mounting bracket supplied |
| Conduit Entries | Two PG-9 cord grips, 0.16-0.31" diameter cable |
| Ambient Temperature | Operating: -40° to + 60°C Storage: -40° to + 70°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 | 2-Wire or External DC unit: 1 lb (0.45 Kg) Battery unit: 2 lbs (0.9 Kg) |
| Certifications | CE marked to BS EN 61326-1:2006 Standard UL and CSA General Purpose |

SENSOR & FLOWCELL SPECIFICATIONS

| | |
|---------------------------|---|
| Peroxide Sensor | Membrane-covered Amperometric (Polarographic) |
| Materials | PVC |
| Response Time | 90% in 60 seconds |
| Temperature Limits | 0-50°C |
| Pressure Limit | 0-50 psig |
| Sensor Cable | 25 ft. (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 Q45/84-A-B Hydrogen Peroxide 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

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 H₂O₂ system should be kept within 25 feet of monitor.
- 3 - Pipe mount requires two 2" U-bolts (47-0005).

Short Term H₂O₂ Data Logger

Model PQ45: Portable H₂O₂ Monitor

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



PQ45 Portable H₂O₂ Data Logger



Visit Us on the Web: www.analyticaltechnology.com

B / Q45/85 / R-1 (5/2014)

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