

# *A Better Way to Protect The Quality of Your Finished Water*



*Model Q45WQ*

Water Quality Monitor

# Multiple Parameter Monitoring System

- **Establish baseline conditions and monitor to ensure water is within acceptable limits**
- **Help identify possible contaminants**
- **Continuously monitor residual disinfectant for compliance with Surface Water Treatment Rule**

ATI's Model Q45WQ Water Quality Panel is a flexible system designed for continuous, on-line monitoring of multiple parameters in municipal water distribution systems and potable water treatment facilities. The instrumentation contained in each Water Quality Panel is selected by the end user and customized to meet your individual monitoring requirements.

The Water Quality Monitors that are used on the panel were designed to provide long service life with minimal maintenance. The panel is easy to start up, as all components have no moving parts to break down, nor do they consume costly reagents.

The Q45WQ Water Quality Panel includes a 3/8" thick PVC mounting plate cut to the customers specified dimensions, integral stainless steel mounting inserts for all analyzers, flowcells, inlet pressure regulator and strainer. All sample delivery hardware is pre-plumbed and a 48 hour factory "wet test" of the complete system is preformed prior to delivery.



## Residual Chlorine

(For detailed information see data sheet PDS Q45H6263)

- **Free or Continuous Measurement:** The monitor is programmable for either measurement with just an easy membrane and electrolyte change. Does not require costly chemicals, reagents or buffers to operate. Large, dual line LCD display.

## Turbidity

(For detailed information see data sheet PDS A15-76)

- **Nephelometric Measurement:** The sensor receives scattered light at a 90° angle through flat surface sensor and is available with infrared or white-light light sources. Stable, self-adjusting electronic zero with wide measuring range.

## Conductivity

(For detailed information see data sheet PDS Q45C)

- **4-Electrode Style Sensor:** Employs 4-electrodes to cover a wide conductivity range of measurement without the need for multiple sensors. Automatic foulant rejection circuitry is used to compensate for sensor fouling.

## Particle Counter

(For detailed information see data sheet PDS C10/77)

- **Laser Based Sensor:** Based on a laser light blocking principle, the sensor provides particle count data over ranges from 2 to 400 microns. Incorporates a removable measuring chamber for easy cleaning and maintenance.

## PH/ORP

(For detailed information see data sheet PDS Q45P/R)

- **Differential-Style Sensor:** A large volume, dual junction saltbridge is used to maximize the in service time of the sensor. A replaceable saltbridge allows for easy and inexpensive sensor regeneration.

## Fluoride

(For detailed information see data sheet PDS A15/82)

- **ISE Sensor:** The system employs a single combination ion selective electrode with a wide measuring range from 1000 PPM down to 0.1 PPM.

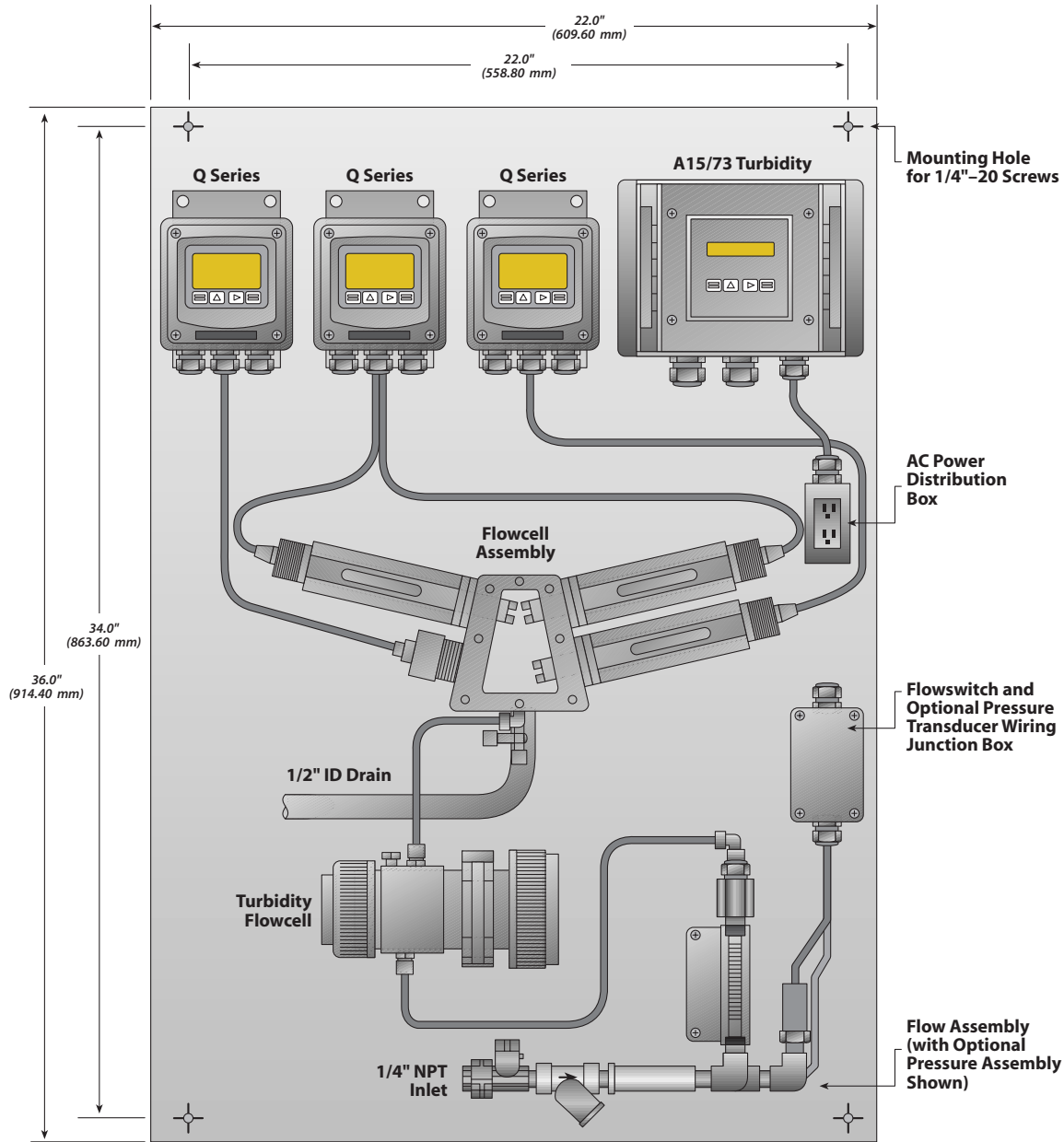
## Dissolved Oxygen

(For detailed information see data sheet PDS Q45D)

- **Galvanic Sensor:** Rebuildable cartridge style membraned sensor with replaceable lead anode.



# Typical System



## Available Parameters

Free Residual Chlorine:	0-200 PPB minimum, 0-20 PPM maximum
Combined Residual Chlorine:	0-200 PPB minimum, 0-20 PPM maximum
pH:	0-14
ORP:	-1000 to +2000 mV
Conductivity:	0-200 mS minimum, 0-200 mS maximum
Temperature:	0-50° C

Turbidity:	0-4 NTU minimum, 0-4000 NTU maximum
Dissolved Oxygen:	0-20 PPM
Particle Counter:	0-1000 counts/ml
Fluoride:	0-1.00 PPM minimum, 0-1000 PPM maximum
Inlet Pressure:	0-200 PSIG
Sample Flowrate:	0-30 GPH

# Model Q45WQ Panel Parameters

## pH/ORP Monitors

07-0001	Q45P pH Transmitter, 2-wire
07-0003	Q45P pH Transmitter, AC with relays
07-0088	Q25P2 pH Sensor with connector
07-0005	Q45R ORP Transmitter, 2-wire
07-0007	Q45R ORP Transmitter, AC with relays
07-0089	Q25R1 Pt. ORP Sensor with connector
05-0060	Salt bridge for pH/ORP
03-0029	Sensors Interconnect cable for pH/ORP
09-0033	Sensors Reference Solution for pH/ORP Sensors

## Conductivity Monitors

07-0013	Q45C4 Conductivity Transmitter, 2-wire
07-0015	Q45C4 Conductivity Transmitter, AC w/relays
07-0090	Q25C4 Conductivity Sensor with connector
03-0029	Sensor Interconnect cable

## Accessories

00-1387	Flowcell Assembly for pH/ORP/Conductivity/Chlorine sensors
60-0049	Pressure Transmitter, 0-200 PSI, 2-wire

## Chlorine Monitors

07-0023	Q45H-62/63 Chlorine Monitor, 2-wire
07-0024	Q45H-62/63 Chlorine Monitor, AC with relays <i>(Specify 62 for Free Chlorine or 63 for Combined Chlorine)</i>
00-0066	Chlorine sensor, Flow type
03-0029	Sensor interconnect cable
05-0005	Free chlorine membrane
09-0011	Free chlorine electrolyte
05-0007	Combined chlorine membrane
09-0010	Combined chlorine electrolyte
05-0004	Misc. o-ring kit

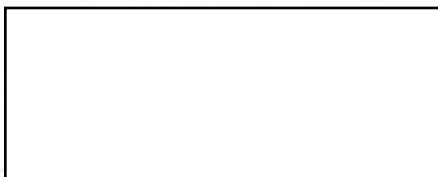
## Turbidity Monitors

60-0029	Turbidity Monitor, panel mount, AC with relays
03-0181	Nema 4X Enclosure for 60-0029
63-0036	Turbidity sensor
63-0037	Turbidity Sensor cable
63-0038	Turbidity Flowcell assembly
55-0048	Fixed flow regulator, 0.2 GPM
55-0050	Flow Switch, 0.1 GPH, NO Contact
60-0050	Flow Transmitter, 0-26 GPH
60-0051	Flow Sensor for 60-0050

Other parameters such as Dissolved Oxygen, Particle Counter, or Fluoride Monitor can be integrated into the system. Contact ATI for special requirements.



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