

Series PQ45 Portable Data-Logger

A complete portable monitoring system housed in a durable carrying case shall be supplied to continuously measure and record _____ (Specify Free Chlorine, Combined Chlorine, Chlorine Dioxide, Dissolved Ozone, or Dissolved Oxygen). Each Portable Monitor shall consist of a battery-powered monitor mounted in a weatherproof case. Along with the monitor shall be a constant-flow control system, sensor, and flow cell assemblies suitable for operation at remote sites where power is not available.

An optional pH sensor and flowcell shall be supplied on systems designed for either Free Chlorine, Combined Chlorine, Dissolved Ozone, or Residual Chlorine Dioxide. This second sensor input shall allow pH data to be logged in addition to the primary measurement.

The monitoring system shall contain quick-disconnect sample and drain fittings on the side of the case. Fitting shall contain shut-off valves that automatically stop flow within the flow system when external sample and drain lines are disconnected. Mating fittings for customer use in external connections shall be supplied, along with 20 feet of sample tubing and fitting for adapting to user piping systems.

The monitoring system electronics and sensor/flowcell systems shall be mounted on a hinged panel inside the case. The hinged panel will allow easy access for service of sensor components, while maintaining a compact internal assembly. The constant-flow control components shall also be mounted on the hinged panel, and the y-strainer that protects the system from large particles shall be easily accessible for cleaning.

Power for the electronic monitor shall be supplied by 2 internal C-cell alkaline batteries. The batteries shall be sufficient to operate the monitor for about 30 days continuously. The monitor shall automatically shut down when the battery voltage falls below that required to maintain reliable measurements. A low-battery indicator on the display shall provide a warning when battery voltage is approaching the shut-off point.

A stand-alone data logger shall be incorporated into the system, with plug-in cables connecting the monitor to the logger. The logger shall store up to 42,000 data point at intervals programmed by the user. The logger shall be read through a standard PC using a USB interface cable supplied with the unit. Software for operation of the logger shall also be supplied.

OPTIONAL: The portable monitoring system shall be supplied for operation off of an external power source from 5-17 VDC. The two analog 0-2.5 V outputs shall be wired for external connection as well to allow easy interface to customer equipment. A quick-disconnect cable assembly shall provide external wiring for both power and outputs. No internal battery components are supplied when the external connection option is provided.

The complete Monitor shall be Series PQ45 as manufactured by Analytical Technology, Inc.
