

## **CB-1450 Data Buoy**

A data buoy system shall be provided to monitor the water quality in (Specify Location).

The buoy flotation shall be constructed of a closed cell, cross-linked polyethylene foam hull with a polyurea skin and Kevlar reinforced top coat providing 1450 lbs of buoyancy. The flotation shall be yellow in color in accordance with international data buoy standards.

The buoy structure shall consist of a type 304 stainless steel frame and tower extension, (3) topside lifting eyes and subsurface mooring eyes for both single-point and two-point moorings.

The buoy shall be fitted with an integral 12" diameter stainless steel data well providing adequate space for batteries and instrumentation. Both feed-through gland fittings and watertight connectors shall be available on an O-ring sealed lid.

The buoy shall allow adequate topside space to accommodate various telemetry modules including radio, cellular, Iridium satellite and WiFi.

The buoy shall be fitted with (3) 55-watt solar panels with a waterproof termination for charging up to (4) 55 A-Hr batteries.

The buoy shall support mounting of both topside and subsurface sensors. The tower top plate shall be pre-drilled for mounting a 4 nautical mile range LED beacon, weather station mast and other sensor supports.

(3) 4-inch pipes, each with 4-inch NPT female threaded fitting, shall allow sensor pass-through and accommodate deployment pipes below the buoy. Hatches shall cover the passages and conceal cables.

The complete data buoy system shall be Series CB-1450 as manufactured by NexSens Technology, Inc. or approved equal.