

CB-25 DATA BUOY

QUICK START GUIDE



Figure 1: NexSens CB-25 Data Buoy

Overview

The CB-25 data buoy is constructed of an inner core of cross-linked polyethylene foam with a polyurea coating that provides 50 lb. of buoyancy (25lbs. with X2-SDLMC logger). Stainless steel plates on the top and bottom of the buoy provide topside lifting handles and subsurface mooring eyes for drifting, tethering, or mooring applications. The center hole accommodates the X2-SDLMC data logger, which includes internal batteries that are recharged by (3) 4-watt solar panels mounted on the top plate.

What's Included?

- (1) Buoy hull, 25 lb. buoyancy
- (1) Buoy tower
- (3) 4-W solar panels
- (3) 1.5" pass-through sensor pipes
- (3) Top-side lifting handles
- (3) Bottom-side mooring eyes
- (1) 2ft. Bottom chain
- (1) Instrument cage (Optional)

Important Specifications

- Net Buoyancy: 50 lbs. (11.34 kg) (25 lbs. with X2-SDLMC)
- Weight: 30 lbs. (13.61 kg) (55 lbs. with X2-SDLMC)
- Center Hole Dimensions: 5.5" (13.97 cm) inside diameter; 11" (27.94 cm) tall

Ballast Weight & Stability

If a small NexSens cage (~10lbs.) is purchased, this will provide adequate ballast. **No mooring apparatus should be connected to the bottom of the cage.** Without a NexSens cage, galvanized chain can be utilized for ballast on the middle eyenut, keeping in mind the 25lbs. of buoyancy. The outside eye nuts should be utilized for tethering to another flotation device.

- a. For more information regarding top-side and ballast weight, follow the link provided:

nexsens.com/dbbwstab

The buoy data well is not rated for submersion, so proper ballast weight is critical to ensure that the buoy does not overturn, including when the buoy is subjected to additional loading (e.g. high wind/waves, periodic snow/ice loads, etc.).

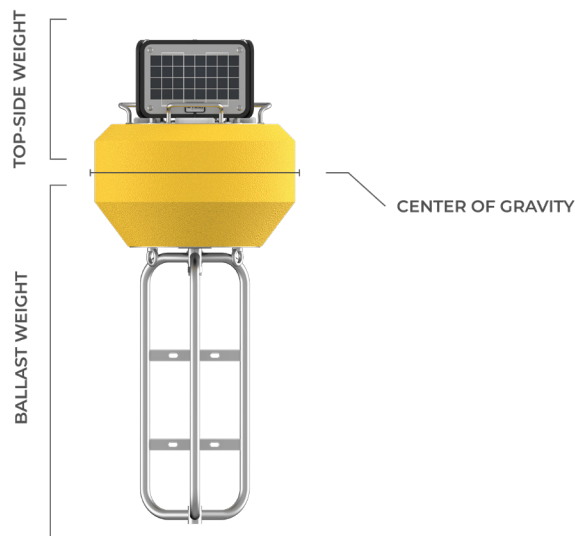


Figure 2: CB-25 buoyancy diagram.

Mooring Configurations

To develop an effective mooring strategy, a variety of application-specific criteria (water level fluctuations, currents and wave action, debris loads, etc.) must be thoroughly reviewed prior to deployment. NexSens does not endorse any particular mooring strategy for any specific application.

- a. For more information on mooring configurations, follow the link provided:

nexsens.com/mooringdb

Safe Deployment

Warning: Always follow safe marine and boating practices. Heavy anchors, ballast weights, and chain require careful maneuvering. Small boats with limited lifting equipment and boat clutter can be unsafe. Care must be taken during deployment to maintain a clean and safe environment.

- a. For more information regarding safe deployment practices and tips, follow the link provided:

nexsens.com/deptip

Saltwater Deployment

Sacrificial zinc anodes should be used whenever a buoy is deployed in a saltwater environment to prevent corrosion. These zinc anodes must be inspected and replaced as needed.

- a. For more information regarding the use of zinc anodes, follow the link provided:

nexsens.com/usecb

For additional information, please reference the CB-25 Resource Library on the NexSens Knowledge Base.

nexsens.com/cb25kb