Sole Source Justification

EMM700 BAY BUOY

SYSTEM OVERVIEW

The EMM700 buoy is robust monitoring platform designed for reliable performance in the toughest conditions. The EMM700 buoy is the perfect buoy for large lakes or reservoirs where fetch creates high energy conditions or estuaries or coastal applications. The marine grade materials utilized in the EMM700 provide years of operational integrity. The EMM700 weighs a total of 185kgs (407lbs) and is made of high quality components. The top plate of the buoy is made from 304 stainless steel, with the bottom plate made from galvanized steel. The two plates are galvanically isolated from one another via specially designed collars on the tie-rods that mate the two pieces together. The system can come with one to two sensor deployment tubes and has the ability to add meteorological sensors to its super structure. The system can also deploy ADCP meters under the buoy with optional mounts, creating one seamless data package. The electronics canister sits down inside the buoy, mounted into the top plate, creating a low center of gravity for a stable platform. The buoys power system consists of 90 watts of combined solar power with 12v, 70ah's of battery for plenty of power for most long term unattended monitoring applications. Lastly one key feature of the EMM700 is the hull material which is closed-cell Ionomer™ Foam, which is unsinkable.

YSI, a Xylem brand
1725 Brannum Lane
Yellow Springs, OH 45387

+1.937.767.7241
info@ysi.com
YSI.com

a xylem brand

FEATURES AND SPECIFICATIONS

1. The buoy hull shall be manufactured of impact resistant, closed cell, Ionomer Foam.
2. The 304 stainless steel tower shall be capable of supporting three 30 Watt solar panels, antennas, beacons, and MET mast.
3. The instrument shall come standard with three 30 Watt solar panels with solar regulator.
4. The instrument shall come standard with 12 VDC, 70 amp hour battery system.
5. The electronics enclosure shall be centrally located for a low center of gravity, making for a stable platform.
6. The polyurethane electronics enclosure shall be capable of mounting data loggers and telemetry.
7. The instrument shall come standard with a Stainless Steel endcap with marine-grade connectors for sensor interface.
8. The electronics enclosure can be removed from buoy for servicing.
9. The instrument shall come standard with marine-grade underwater connectors.
10. The instrument shall be capable of operating in depths as shallow as 4 meters.
11. The instrument shall be equipped with an expandable payload to easily accommodate additional water quality sensors, meteorological sensors, ADCPs (bottom or buoy mounted), and other 3rd party sensors (customer specified).
12. The instrument shall be capable of having two point or single point mooring options.
13. The instrument shall be yellow in color to signify an environmental monitoring system.
14. The instrument shall come standard with an external marine-grade antenna system with built-in lighting protection.
15. The instrument can be serviced without the need for divers.
16. Integral underwater cable assembly shall be included for any YSI EXO or 6-Series water quality sonde.