



MOORED DATA BUOY SYSTEMS



Data buoys play a primary role in providing in-situ ground-truth measurements, stands as a reference point for validating ocean related data from other observational means and provides inputs to various models to predict and forecast weather and long-term climatic changes.

The coastal buoy systems are floating platform consisting of FRP hull, instrument container, sensor arms, frames, floats and other sensors selected based on the detailed study on coastal current, cyclone, water quality, radiation and other similar parameters. The mooring system is a combination of various types of ropes and chains connected by suitable mooring hardware. This keeps the buoy in the deployed location. In the case of coastal buoy, chain, combination rope and FRP floats are used for mooring, and 2 nos of concrete weight of approximately 1 ton each as anchor weight.

Data Buoy consists Unit micro controller based Embedded Unit CPU. This CPU processes the meteorological, Oceanographic and water quality parameters received from various sensors and then send the processed data to base station using satellite transmitter. CPU also controls the power to the sensors, stores the raw sensor data in Compact flash and processed data in NVSRAM. The Solar charge Panel apart from charging the battery, it also takes care of overcharging the battery and deep discharging



This technology is developed by **National Institute of Ocean Technology**, Ministry of Earth Sciences, Govt. of India and seeks to stimulate the use of technology by commercialization under Make in India Initiative and **National Research Development Corporation** will facilitate for smooth transfer and licensing of the technology with affordable Licencing terms and conditions.

Any company or organization interested in the technical know-how and to get more details about the technology please refer the contact details below.

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