



## MET OCEAN BUOY SYSTEM TYPE - 1



The Data Buoys are moored offshore platforms, fitted with meteorological and oceanographic sensors, deployed at specific locations to observe in-situ Met-Ocean data and subsea parameters at regular intervals. Met ocean buoy system type - 1 is a floating platform consisting of FRP hull, instrument container, sensor arms, frames, FRP floats and other met sensors. The central processing unit was developed for rapid data collection during cyclone. This buoy system is capable of integrating the radiation sensor to monitor the environmental radiation in the field over the sea sectors to track the radioactive plume for the purpose of event detection and source term estimation when the plume transits over the sea-side under off-shore flow condition around the nuclear facilities for continuous radiation surveillance. The buoy system has the facility to transmit data using IMARSAT, INSAT, Iridium and GPRS modems and currently utilizes INSAT and GPRS for data telemetry.

This buoy system is mainly used at coastal waters to study the variability of coastal current, wave, temperature and salinity along with other meteorological parameters. The Data acquisition interval, data transmission interval and sampling frequency are configured based on the end application requirements. 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. It also provides inputs to various models to better predict and improve weather and climate models.



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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