

AUTONOMOUS PLANKTON SAMPLER

Development of a Moored System



Following on from the success of the towed vehicle operated Autonomous Plankton Sampler, a suitable pump needed to be identified to address the requirement for a moored system. The pump needed to supply a significant volume of water from a limited power budget. After searching available pumps on the market the Challenger Oceanic Ltd Centrifugal Pump offered unequalled advantages. The combined Plankton Sampler / Pump System offers the capability of collecting plankton from up to 12,000 litres of water. A standard Battery Unit, taking a 15VDC 30Ahr Compound Alkaline Cell provides power in the case of the stand alone system, with a MiniPack CTD-F collecting salinity, temperature and chlorophyll-a data during the course of the deployment, and switching power to the pump at pre-programmed intervals.

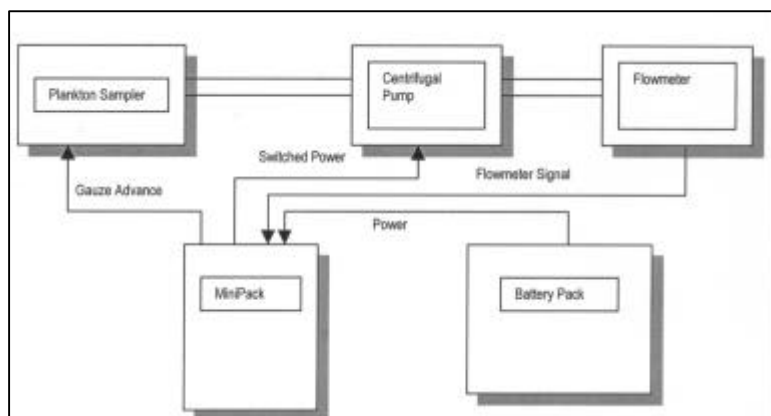


Fig. 1. Schematic Layout of Plankton Sampler Moored System

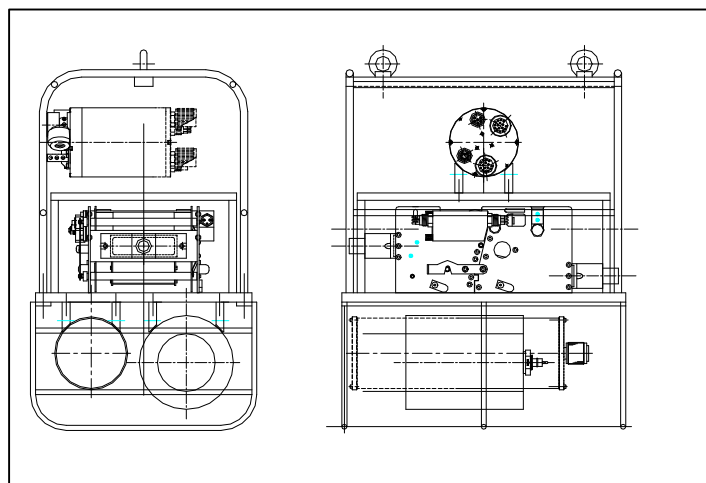


Fig. 2. Mechanical Layout of Plankton Sampler Moored System



Plankton Sampler



MINI^{pack} CTD-F



Centrifugal Pump



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