

ENVIRONNEMENT

Mini Pack

- Compact, robust
- Low cost
- Fully integrated CTD-F sensor



APPLICATIONS

- High performance monitoring of oceans, rivers, lakes and estuaries
- Intelligent host for multi-parameter systems
- Designed for towed vehicles, moorings & profiling
- Pollution monitoring
- Dye plume tracking

FEATURES

- Developed jointly with the Sir Alister Hardy Foundation.
- On-board conductivity, temperature, depth and fluorescence
- Compact and high performance
- SmartMedia™ card memory gives high capacity
- Internal batteries or externally powered
- Real time data acquisition option
- Output in engineering units
- Fluorescence options of chlorophyll-a, turbidity, rhodamine, amido rhodamine, fluorescein, Phycoerythrin or Phycocyanin
- Programmable power switching for external devices

MINIpack is a low cost, compact, robust and fully integrated CTD-F sensor suite designed to meet the demands of open ocean, estuarine and fresh water environmental monitoring, incorporating a 24 channel data logger. MINIpack is designed to be a multi-parameter sensor data logger that can be deployed individually or as the core of a larger multi-parameter system. As such, it may be used as a discrete profiling instrument, installed on a data buoy, moored in the ocean or to form the core of a towed undulating vehicle system. It has been designed specifically for easy installation into the Chelsea Technologies Group's range of towed vehicles.

This compact instrument contains a fluorimeter, conductivity, temperature and depth sensor. These sensors are coupled to a high performance data logger. For real time applications, the MINIpack is provided with a transmission system with the capability of providing power to and acquiring data from up to 16 external sensors (14 differential channels & 2 single ended channels). These may typically include dissolved oxygen, pH, PAR, up & downwelling sensors, fluorimeters & transmissometers. A titanium / acetal housing contains all on-board sensors, processing boards, data transmission or internal batteries.

The highly versatile SmartMedia™ is used for pre-programming and storing of measured data. This data is easily extracted by a PC and presents data in ASCII files in engineering units, which are easily processed by propriety software packages. Data may be stored on the internal SmartMedia™ Card (for standalone mode) or transmitted in real-time up the cable using RS422 (RS232 option) format. An interface unit is available to convert RS422 (or RS232) for onward transmission to a PC. A user-friendly Windows based GUI enables error free programming of the internal logger and data extraction.

Technical specifications	
Size	• 114 mm dia. X 200 mm
Weight	• 3.25 kg in air 1.8 kg in water
Depth rating	• 600m
External input	• 18 to 72VDC 10 to 15VDC
Type	• RS422
Data rate	• 9600 baud
Scan rate	• 1Hz to 1 sample/day
Sample period	• 1 sec to 1 day
Sampling interval	• 1 sec to 1 day
capacity	• 16 Mbyte Storage Card
No of reading	• 100.000 records of all 24 channels

Fluorimeter	Excitation Wavelength:	Emission Wavelength:	Concentration range:	Resolution:
Chlorophyll-a	470/30nm	685/30nm	0.03-100µg/l	0.01µg/l
Chlorophyll-a	430/30nm	685/30nm	0.03-100µg/l	0.01µg/l
Rhodamine	470/30nm	590/45nm	0.03-100µg/l	0.01µg/l
Amido Rhodamine	425/30nm	550/30nm	0.04-200µg/l	0.025µg/l
Fluorescein	480/80nm	530/30nm	0.03-100µg/l	0.01µg/l
Nephelometer	470/30nm	470/30nm	0.04-100FTU	0.01FTU
Phycocerythrin	530/30nm	580/30nm	0.03-100µg/l	0.01µg/l
Phycocyanin	590/35nm	645/35nm	0.03-100µg/l	0.01µg/l