



OSIL
Environmental Instruments
and Systems

OSIL MINIBAT FC60

The Complete Solution for Coastal and Freshwater Research Applications

The OSIL MiniBAT FC60 is an extremely lightweight, remotely controlled towed instrumentation platform designed for use with a wide variety of data collection instruments. It provides an extremely flexible profiling system for use in estuaries, lakes, rivers, and coastal areas. The MiniBAT FC60 is easily deployed by one person from virtually any size of vessel and performs at a user set depth below the surface, above the seabed or in an undulating pattern between 2 depths down to 60 metres. Suggested towing speeds are in the range of 1 to 10 knots and the typical speeds for the average field survey are 4 to 6 knots.



The basic system consists of:

- MiniBAT FC60 tow body
- Onboard control electronics
- On board pressure sensor
- Adjustable wings
- Graphical interface software control box
- 7-conductor Y-cable

One branch of the Y-cable controls the MiniBAT, leaving four conductors for user instrumentation.

Features:

• Flexible mounting of existing instrumentation	• Remote undulation control by computer
• Easy towing with a 5 to 10 meter power boat	• Profiling at speeds up to 10 Kts
• Power - 12VDC battery or 120/240V line	• Direct depth measurement
• Operational depth - surface to 60 meters	• Auto bottom following and avoidance
• GPS data recorded (Optional)	• Basic depth stability: < 1 meter graphical display of flight path

FOR FURTHER INFORMATION PLEASE CONTACT:

OSIL, Culkin House, C7/8 Endeavour Business Park, Penner Road, Havant, Hampshire PO9 1QN
T: +44 (0) 2392 488240 F: +44 (0) 2392 488241 E: osil@osil.co.uk W: www.osil.co.uk



OSIL
Environmental Instruments
and Systems

OSIL MINIBAT FC60

MiniBAT FC60 Control Software

The control software allows the user to have the MiniBAT FC60 undulate over a desired depth range, maintain a constant depth, or maintain a given elevation above the bottom. It presents a graphical display of the MiniBAT's position with respect to the bottom and logs this information along with latitude, longitude, boat speed, wing angle, time, and date. There is an additional line in facility to integrate the GPS data (NMEA0183) into the display and logs.

The software provided is independent of any software which may be needed to control and recover data from the instrumentation onboard the MiniBAT.

Systems

Complete systems including the MiniBAT FC60, instrumentation, sea cable, winch, control box, software and systems integration can be supplied on request.

Please note we are also able to integrate existing instrumentation into the MiniBAT FC60 on request.

SPECIFICATIONS

Tow Body

Overall Length..... 75 cm
Overall Width70 cm
Body Width.....13 cm
Air Weight (unloaded).....13 kg

Construction Materials

Stainless Steel, PVC, Delrin

Power

MiniBAT Power Module.....30 watts
Requirements for MiniBAT Power
Module: 120/240 VAC supplied either directly, or
via a 12 VDC battery and DC to AC converter.
Operating Voltage: +/-12 VDC floating
Consumption.....6.5 watts

MiniBAT Control Data

Transmission
Conductor Cable: 8 mm diameter, 7-conductor
(Kevlar suggested)
Data Format: NMEA 0183
I/O RS-232, 4800 baud

On-Board Depth Sensor

Safe Working Range0 to 100 m
Resolution 0.4 m
Operational Depth60 m

Typical instrumentation which can be supplied with the MiniBAT FC60 in an Integrated System includes:

CTD's	Dye Tracers
Chlorophyll	Sound Velocity Sensors
Turbidity	Optical Plankton Counters
DO	Acoustic Instruments
pH	PAR



FOR FURTHER INFORMATION PLEASE CONTACT:

OSIL, Culkin House, C7/8 Endeavour Business Park, Penner Road, Havant, Hampshire PO9 1QN
T: +44 (0) 2392 488240 F: +44 (0) 2392 488241 E: osil@osil.co.uk W: www.osil.co.uk