

Underwater Inductive Modem Module

UIMM



The Underwater Inductive Modem Module (UIMM) provides a quick way for system integrators and instrument/sensor manufacturers to adapt new or pre-existing RS-232 instruments, such as acoustic current meters, Doppler profilers, optical sensors, etc., for integration with real-time moorings using Sea-Bird's Inductive Modem (IM) telemetry. (See *Real-Time Oceanography with Inductive Moorings* on our website for detailed system description.)

The UIMM is simply an Inductive Modem Module (IMM) housed in a pressure case and incorporating an integral inductive coupler and cable clamp. It is designed to be cable-connected to an RS-232 serial device such as a current meter, and then clamped to the jacketed mooring wire. The UIMM can also be used as a substitute for an IMM (housed inside a buoy) and an Inductive Cable Coupler (ICC). For this case, the UIMM receives inductive communications from other underwater IM devices and sends the data via RS-232 to the surface buoy (or bottom junction in a cabled observatory).

The IMM can be user-configured via RS-232 to send and receive commands necessary to control the serial instrument and receive or retrieve data. The UIMM communicates with an RS-232 instrument and requires a small amount of power from it via a 4-pin connector (UIMM does not have an internal power supply).



UIMM SPECIFICATIONS

Sensor interface: RS-232

Sensor baud rate: 300, 600, 1200, 2400, 4800, 9600, or 19200 (IM telemetry rate 1200 baud)

Memory for sensor data: 16 KByte (40 stored samples maximum)

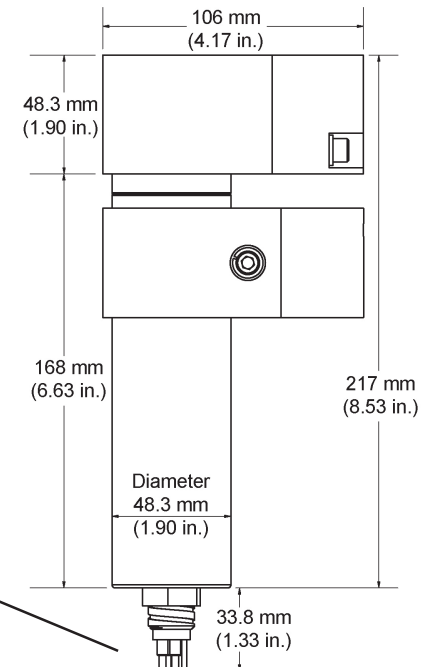
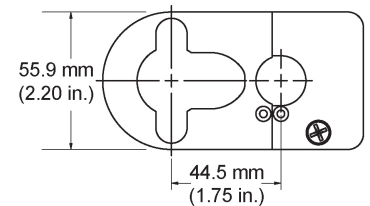
External power required: 6 - 30 VDC

Quiescent current: 300 microWatt *

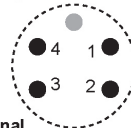
Operating current: 15 milliWatt *

* Power draw higher for input voltages > 19 VDC; consult factory.

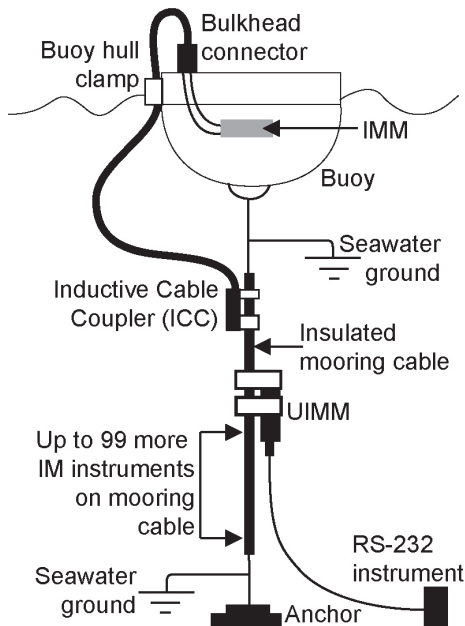
Materials: Titanium (7000 meter) or Plastic (350 meter) housing



Wet-Pluggable
MCBH-4MP (WB), TI
(3/8" length base, 1/2-20 thread)



Pin	Signal
1	Common
2	RS-232C data receive
3	RS-232C data transmit
4	External power in (6 - 30 VDC)



Typical Ocean Mooring
(other configurations available)

02/10