

BAM

Beam Attenuation Meter Transmissometer

The Beam Attenuation Meter (BAM) is a transmissometer specifically designed for Autonomous Underwater Vehicles (AUV's) where size and drag are primary considerations. The BAM utilizes a rigid face plate for optical stability and a recessed sensing volume for low profile applications.

Features

- Compact size
- Rugged construction
- High precision and stability
- Digital electronics
- Protected optics
- Flush mountable

Options

The BAM is available in three wavelengths

- Red (650 nm): Best for particle dynamics, e.g. mass concentration estimates.
- Green (530 nm): Best for estimates of in-situ visibility.
- Blue (470 nm): Best for estimating blue light penetration.



Optical

Pathlength	10 cm
Wavelengths	470, 532, or 650 nm
Acceptance Angle	~1 deg
Precision, 532 and 650 nm	0.003 m ⁻¹ @ 1Hz

Electrical

Input	7.5-15 VDC
Operating Current: 532 and 650 nm	35 mA
RS-232 Output	19200 baud
Output resolution	14 bit
Sample rate	to 8 Hz
Connector	MCBH-6-MP

Mechanical

Length	19.56 cm
Height	12.45 cm
Width	6.35 cm
Weight in air	3.28 kg
Weight in water	2.06 kg
Internal Air Volume	454 cc

Environmental

Temperature range	-2 - 40 °C
Depth Rating	1000 m
Temperature stability 38-3-20 °C	0.02 % F.S./ °C
Long term stability (6 hrs)	0.02 % F.S./Hr

