



1. Instrument Overview

Date

Instrument Name:	
PIName(s):	
Employer/Affiliation:	
Phone Number:	
Email Address:	
Planned Proposal Date:	
Instrument Vendor (or developer):	
Instrument Model (if commercial):	
Proposed Location(s):	
Deployment Depth (m):	
#Instruments Requested:	
Expected Deployed/Operational Life:	
Maturity of Instrument (e.g. commercial, prototype, concept):	
Estimated Deployment Readiness Date:	

Brief Description of Instrument/Platform Objectives:

2. Electrical

2.1 Instrument Power Requirements

Input Voltage Range (V)	<input type="text"/>
Peak Operating Current (A)	<input type="text"/>
Power-on Inrush Current (A)	<input type="text"/>
Power-on Inrush Duration (ms)	<input type="text"/>

Describe any known sensitivity to power supply noise:

2.2 Electrical Isolation

Instrument is electrically isolated from seawater

If not, Explain:

2.3 Communication Protocol(s) (select supported):

- RS-232; CTS/RTS required? RS-422
 RS-485 (half duplex) RS-485 (full duplex)
 Ethernet: 10Base-T Ethernet: 100Base-T
 Other:

2.4 Timing (select all that apply):

- Instrument has an internal real-time clock
 Instrument uses 1 PPS signal input
 Instrument connects to an external NTP server
 Instrument connects to a PTP server
 Instrument clock can be set via software command

Describe Expected Method for time-stamping data:

Other electrical information (e.g., on-board processor type/limitations):

3. Mechanical

3.1 Dimensions

Length (inches)	<input type="text"/>	(cm)	<input type="text"/>
Width (inches)	<input type="text"/>	(cm)	<input type="text"/>
Height (inches)	<input type="text"/>	(cm)	<input type="text"/>

3.2 Weight

Dry Weight (lb)	<input type="text"/>	(kg)	<input type="text"/>
In water weight (lb)	<input type="text"/>	(kg)	<input type="text"/>

3.3 Depth Rating

Maximum Depth Rating (m)

3.4 Materials

List Materials in contact with seawater:

3.5 Connector

Connector Model and Pinout (may be attached as a separate sheet):

3.6 Photos/Drawings

Please provide drawings, photos, or solid models attached as a separate sheet.

Other mechanical information:

4. Deployment, Recovery and Handling

4.1 Deployment

Instrument will be mounted directly on existing platform

Instrument has its own platform or frame

Describe deployment operations (e.g. free fall to seafloor, use of ship's wire, ROV handling), including any special preparation required (may be attached as a separate sheet):

4.2 Recovery

Describe recovery operations, including any special post-recovery procedures (may be attached as a separate sheet):

4.3 Special Sampling/Calibration/Verification Requirements

Describe any special reference measurements or samples that must be taken during deployment and/or recovery of the instruments, or considered for placement on the array (e.g., must be near CTD, gastight fluid sample needed, etc.):

4.4 Special Handling

Describe any special handling considerations (e.g. instrument must be kept in temperature-controlled environment):

Other deployment, recovery, or handling information:

5. Output Data & Command/Control

5.1 Output Data (select all that apply)

- Data will be streamed in real (or near-real) time
- Data will be recovered from instrument after deployment (e.g. sample analysis)

List measured scientific parameters (may be attached as a separate sheet):

Sampling Frequency (Hz)

Data Output Frequency (Hz)

Estimated daily data output (MB)

Describe the output data and provide an example data record (may be attached as a separate sheet):

5.2 Command and Control (Select all that apply)

- Instrument requires remote command interface to operate
- Top-side GUI-based software is available for operations
- Instrument can be operated through a command line interface

Describe instrument command protocol (may be attached as separate sheet):

Other output data and command/control information:

5.3 Data Embargo

A one-year data embargo is requested and will be included in the Data Management Plan

Describe data embargo considerations (may be attached as separate sheet):

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6. Environmental

Select all that apply

While deployed, instrument will be in contact with the seafloor

If checked, describe the interface with the seafloor (e.g. on tripod, within frame, buried in caisson, etc.):

If checked, provide frequency (including out-of-band emissions), source level and interval of acoustic output:

Instrument outputs acoustic signals

Instrument outputs optical signals

If checked, provide wavelength, power level, and interval of optical output:

If checked, list exhausted chemicals, concentrations, volume and output interval:

Instrument exhausts chemicals into surrounding water

Instrument is sensitive to environmental outputs from other deployed equipment

If checked, describe sensitivity to other equipment:

If checked, how close and to which instrument/platform (e.g., within 20m of installed pressure sensor)

Instrument should be deployed adjacent to or near another instrument or platform

Other environmental information:

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7. Marine Implementing Organization Review

Suggested Node(s) & Port(s):

Port Modifications Needed:

Platform Modifications or Mounting Equipment Needed:

Recommended Configuration (connectors, type, length):

Overall Instrument Readiness

- READY - Instrument is fully developed; interfaces are known and understood
- Minor modifications are needed to make this instrument ready
- More development is needed to make instrument ready (this may include selection and implementation of communications protocols, conversion from battery power, etc.)