

Supplier Scouting Opportunity 2023-006

Item to be scouted: compact dual channel titanium temp and depth recorders

Days: 15

Item description:

PMEL is currently conducting proposal funded research with a single RBR Duet instrument and have fabricated attachment accessories that uniquely fit the RBR Duet. PMEL's research plan requires consistency in measurement across five different fishing vessels that will deploy the instruments. To accomplish this funded work, PMEL needs four additional instruments.

Market research indicates that a comparable instrument is not readily available (see below). Further, introducing an instrument from a different manufacturer into the group of five instruments will complicate the analyses and add unknown variation to the dataset.

The key characteristics that PMEL require are:

- (1) dual-channel measurement of temperature and pressure
- (2) ruggedized design with a 10,000 meter depth rated case (for durability in planned deployments on commercial fishing vessels) and a 500-meter depth rated pressure transducer (to cover the majority of future EcoFOCI research needs)
- (3) combination of battery and memory capacity to enable up to 4 month deployments at 1 Hz
- (4) hands-off operation to allow the instrument to be deployed by volunteer non-specialists

The RBR Duet is commonly used in oceanographic research. One competing company is Sea-Bird Scientific. Sea-Bird instruments do not have the same specifications as the RBR Duet.

For example, the SBE 39plus is limited to a ~2 month deployment at 1 Hz. The SB 56 instrument has adequate battery and memory capacity, but only measures temperature (not depth/pressure). The SBE 38 must be externally powered.

Market research indicates that a comparable instrument is not readily available.

NAICS code: 334512

Technical Information

Supplier Information

Type of supplier being sought: Any vendor who can provide a comparable product

Reason for scouting submission: current materials supplied by client is foreign

Summary of technical specifications and performance requirements

Describe the manufacturing processes (elaborate to provide as much detail as possible):

Electronics and Mechanical assembly

Provide dimensions / size / tolerances / performance specifications for the item:

- dual-channel measurement of temperature and pressure
- ruggedized design with a 10,000 meter depth rated case (for durability in planned deployments on commercial fishing vessels)
- 500-meter depth rated pressure transducer (to cover the majority of future EcoFOCI research needs)
- combination of battery and memory capacity to enable up to 4 month deployments at 1 Hz
- hands-off operation to allow the instrument to be deployed by volunteer non-specialists.

List required materials needed to make the product, including materials of product components:

Electronic and mechanical components

Are there applicable certification requirements?: No

Are there applicable regulations?: No

Are there any other standards, requirements, etc.?: No

Business Information

Volume and pricing

Estimated potential business volume:

Quantity of 4 needed

Estimated target price / unit cost information (if unavailable explain):

\$3,744.00 each

Delivery requirements

When is it needed by?:

Feb 1, 2023

Describe packaging requirements:

individually packaged

Where will this item be shipped?:

Seattle, WA