

**SINGLE SOURCE DETERMINATION USING
SIMPLIFIED ACQUISITION PROCEDURES (SAP)
FOR AN ACTION NOT EXCEEDING THE SIMPLIFIED ACQUISITION THRESHOLD
(AUTHORITY: FAR 13.106-1(b)(1))**

(Insert PR/RFQ number, as applicable)

1. **Agency and contracting activity.** Department of Commerce, NOAA Acquisition and Grants Office (AGO), Ocean Exploration Research Division (OERD) and NOAA's Pacific Marine Environmental Laboratory (PMEL)

2. **Description of supplies or services required to meet agency needs (including the estimated value).**

This request is for an order of n=16 RockBLOCK 9603 SMA connector fitted Iridium Modules. The RockBLOCK 9603 SMA connector fitted Iridium Modules are incorporated into the Innovative Technology for Arctic Exploration (ITAE) PopUp float project. ITAE has been purchasing these Iridium Modules to build the PopUp floats for the last three generations of PopUp float design. The PopUp floats are designed to deploy easily at sea, anchor to the bottom, release their anchor, collect vertical profile data and under-ice data, and transmit that data back to the PMEL lab network via an Iridium short-burst-data module. The floats are designed to work with the Iridium satellite DOD network. RockBLOCK 9603 with SMA connector is a required part on the float in order to send the data through the DOD Iridium network and to communicate with the specific code written for the PopUp floats. The specific Iridium 9603 model is the important piece of this request; not where we purchase it from. We respectfully request procurement through an individual purchase order. We request that we make this order with enough time to arrive by around December 20th, 2018. In the past, timing from order to delivery was about 2-3 weeks.

3. **Identification of the single source or the brand name to be solicited.**

RockBLOCK 9603 with SMA connector Iridium Module

4. **Supporting rationale.** Only one source or brand name is reasonably available as detailed below:

Brand Name – This particular brand name is essential to the requirement and market research indicates similar products do not meet or cannot be modified to meet agency needs.

The RockBLOCK 9603 with SMA connector is manufactured by Rock Seven Mobile Services Ltd. We require this model of Iridium modem because our programmed code for the PopUp floats is written to the specifications of the RockBLOCK 9603. The printed circuit board pins are also designed to work with the RockBLOCK 9603 with the SMA connector. We require the SMA connector to outfit a larger antennae that will be able to make satellite connections even through the enclosed housing of the PopUp end cap. The RockBLOCK brand and model are important to maintain uniformity in the design functionality and program code of the PopUp floats.

Compatibility to existing systems or equipment - The required supplies or service must be compatible in all aspects (form, fit, and function) with existing systems or equipment and the source is uniquely qualified to meet the requirement.

The RockBLOCK 9603 with SMA connector is incorporated into the PopUp float design and function. The PopUp float is a developmental technology asset for NOAA. Similar products from different brands (ex. SatphoneStore, Beam) do not have an SMA connector or a Molex 51021 header; both requirements for the Iridium modem to integrate with the PopUp float circuit board. The code for the PopUp float that controls data collection sampling, storage and transmission is written for the RockBLOCK 9603 Iridium modem with SMA connector. For the purpose of compatibility and continuity with the PopUp float design, purchasing the RockBLOCK 9603 with SMA connector is a priority.

5. Market Research

Market research entailed searching for requirements compatible with the circuit board design and code for the short burst data text messages extensively online and speaking with PopUp developer Dan Langis. It is clear that in order for the PopUp floats to function as engineered, the RockBLOCK 9603 with SMA connector is a requirement and cannot be replaced by another model.

The RockBLOCK 9603 with SMA connector can be purchased from various sources as follows:

RockBLOCK 9603 with SMA connector can be purchased directly from the manufacturer: Rock Seven for \$249.00 each. Competing sources for the model include: Sparkfun- \$249.95 each, Quick Online- \$488.15 each, Adventurer's Bag-\$478.15 each, and AmberLogix-\$199.00 each. Unfortunately, the cheapest option (AmberLogix) only has one module left in stock.

Rock Seven is based in the UK, and shipping from Rock Seven is estimated to be around \$25 dollars. SparkFun ships from Colorado and has free shipping on orders over \$75 in the U.S. Overall, the cheapest option would be to purchase 16 modules from SparkFun; a total of \$3,999.20.

Technical/Requirements Representative Certification

I certify that this requirement constitutes the Government's minimum needs and the supporting data provided herein is accurate and complete to the best of my knowledge and belief.

Sarah Donohoe, EcoFOCI Scientific Support Officer 11/13/2018
Date

6. Determination (Required)

I hereby determine that the circumstances of this action deem only one source is reasonably available. This determination is accurate and complete to the best of

my knowledge and belief.

Benjamin Carlson Contracting Officer

Date