

**INVITATION FOR DOCUMENTED QUOTE (DQ) – THIS IS NOT AN ORDER**

**Bid Number: EQ25010 Optical Atomic Clock System DQ**

Purchasing Agent: Elevate Quantum

E-Mail: RFQ@ElevateQuantum.org

**BID DUE DATE AND TIME:** **7, April, 2025, 5:00** **PM (Mountain Time)**

|  |  |  |
| --- | --- | --- |
| **SCHEDULE OF ACTIVITIES** | **DATE** | **TIME (MT)** |
| DQ Publication | 14, March, 2025 |  |
| Written Inquiry Deadline | 24, March, 2025 | 3:00 PM |
| Publication of Responses to Written Inquiries | No later than 31, March, 2025 | 5:00 PM |
| DQ Submission Deadline | 7, April, 2025 | 5:00 PM |

**SUBMISSION FORMAT:**

Submit the following proposal information. Please name each file appropriately per the below.

1. **SIGNATURE** section, completed and signed
2. Completed Documented Quote Paperwork/Pricing filled out below
3. Signed W-9, W-8BEN, or W-8BEN-E (whichever applies)
4. Any addenda submitted via e-mail, signed
5. Warranty Literature
6. Product Literature
7. Any other documents or information requested
8. **DQ Bid # and name must be included in the subject line of your email for all communications (ex: “EQ25000 Equipment Spec DQ”)**

**DESCRIPTION:**

Elevate Quantum (EQ) seeks bids for an Optical Atomic Clock System on a **“FOB Destination, prepay and add”** basis.

**DESIRED SPECIFICATIONS:**

EQ seeks bids for an Optical Atomic Clock System (OACS) composed of two separable major components to allow maximum flexibility and future upgradability. The OACS will be composed of an Optical Frequency Reference (OFR) and an Optical Frequency Comb (OFC). The system should ideally be specified as a rack mounted configuration and will be located in a multiuser lab facility. The intention of the system is to house the OACS in a secure room and route the RF or optical signals to individual lab rooms. If there is a maximum wire or fiber run length out of the OACS please include that information in your bid.

OACS Requirements:

* Evidence of close-to-active-hydrogen-maser performance: Demonstrated Allan Deviation of around 3x10-13 at 1 second andaround 1x10-14 at 1000 seconds.
* Both OFR and OFC components will operate in the ITU C Band for compatibility with existing telecom infrastructure
* Both OFR and OFC must be entirely air-cooled and rack mountable, with a total rack height < 6U
* Typical power consumption < 150 W

OFR Requirements:

* Optical output will be in the ITU C Band for compatibility with existing telecom infrastructure. An acetylene-referenced OFR at 1542 nm satisfies this requirement
* Line width < 300 Hz
* Long term (1 year) accuracy of ≤ 2 x 10-12
* Auto locking to atomic/molecular reference transition
* Rack height ≤ 3U

OFC Requirements:

* Optical output will be in the ITU C Band for compatibility with existing telecom infrastructure. An Erbium fiber OFC satisfies this requirement
* Frequency output (Repetition rate) = 100 MHz
* Optical bandwidth > 40 nm at -10 dB full width
* fceo typically around 400 mrad or better
* fceo frequency stability better than 5x10-17 measured in-loop Modified Allan Deviation at 1 second
* Rack height ≤ 2U
* Interface via front screen GUI and API commands
* OFC must support upgrade path for using a different OFR in the range of 490 – 2000 nm
* Locking electronics for fceo and fopt will be included

**PERFORMANCE REQUIREMENTS:**

Any services provided (including but not limited to installation) must be completed Monday through Friday, 7:00am – 5:00pm.

The Contractor shall furnish all labor, materials, and equipment needed in order to perform services.

If any services are being provided in association with the equipment/items, Contractor must obtain and maintain the minimum insurance coverages set forth in Exhibit A **“INSURANCE REQUIREMENTS”** during the duration of the contract.

While on site, all Contractor personnel shall wear identifiable uniforms or easily identifiable badges displaying the name of the company and the individual.

The contractor shall be solely responsible for any damages caused by its workforce while performing the services. If damage occurs, the contractor shall notify EQ as soon as reasonably possible and repair damages immediately at no cost to EQ. If immediate repairs are not possible, repairs shall be scheduled within 24hrs. The contractor shall provide labor and materials for the repair or replacement of these damages at no cost to EQ.

**PRICING:**

Item 1:

Quantity:

Manufacturer:

Part #:

Item 1: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Each

Item 1: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Total

List any other notes related to Item 1:

Item 2:

Quantity:

Manufacturer:

Part #:

Item 2: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Each

Item 2: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Total

List any other notes related to Item 2:

**Delivery:**

Type of shipping method: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Number of shipments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Estimated arrival date(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Shipping Cost: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Ship To:**

**Elevate Quantum COmmons campus located at:**

**18300 CO-72**

**Arvada, CO 80007**

**Training (if applicable):**

Do you provide training? Provide details:

**Installation (if applicable):**

Do you provide installation? Provide details:

Bidder to provide facilities guidelines identifying dimensions, environmental requirements, utility requirements, and a list of any required support equipment not provided by bidder.

Estimated Installation Cost(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Estimated Installation date (s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Warranty:**

Duration of Warranty: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Warranty Cost: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (if applicable)

(Please include warranty details in a separate file)

**SERVICE CONTRACT:**

Do you offer a post-warranty service contract option? If yes, please provide details.

**OTHER:**

Include details for any other applicable costs:

**AVAILABLE DISCOUNTS:**

Describe any available discounts available to Elevate Quantum should an award be made. Please describe the parameters under which these discounts are available.

**TOTAL BID PRICE:**

We offer the above goods without exception or qualification, for the listed prices of:

**Item Cost: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(USD)**

**Training Cost: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(USD)**

**Installation Cost: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(USD)**

**Shipping Cost: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (USD)**

**Warranty Cost: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (USD)**

**Service Contract Cost: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (USD)**

**Other Costs: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (USD)**

**Total Cost of Items: $\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (USD)**

**EXPORT CONTROL CLASSIFICATION NUMBER (ECCN):**

If the product has an ECCN number, please provide the number:

**BID SUBMITTAL AND CONDITIONS:**

**Bids must be submitted before the bid due date and time. Submission is via email to: (**[**RFQ@ElevateQuantum.org**](mailto:RFQ@ElevateQuantum.org)**).**

**DQ Bid # and name must be included in the subject line of your email for all communications (ex: “EQ25000 Equipment Spec DQ”)**

**Questions must be submitted via email to RFQ@ElevateQuantum.org prior to 24, March at 3:00 PM MT.**

All bids must include this DQ form completed, answers to the required questions and any additional requested information.

All bids submitted must be signed by a duly authorized official of the company.

Fax or hardcopy bids will not be accepted.

EQ reserves the right to reject any or all submittals.

EQ will not accept a quote as a bid.

EQ *may* allow Bidders an opportunity to cure minor submissions errors.

Elevate Quantum encourages participation from all types of businesses including, but not limited to: Small, Minority-Owned, Women-Owned, Disabled Veteran-owned, Veteran-Owned, and Large. If your company can provide the goods and/or services as requested, we encourage you to respond to this solicitation.

**COMMUNICATIONS:**

All communications regarding this solicitation should be sent **via e-mail** to: RFQ@ElevateQuantum.org

This DQ and any written modifications, as posted on [www.elevatequantum.org](http://www.elevatequantum.org) , represent the entire solicitation. Any information about this solicitation received by Bidders from sources other than from the documents posted on [www.elevatequantum.org](http://www.elevatequantum.org) or via email from the EQ RFQ team shall have no effect on the solicitation.

Bidders finding fault in the specifications contained in this bid should notify the Purchasing Agent listed in this solicitation upon receipt of this DQ.

**MODIFICATIONS / ADDENDUM:**

In the event that it becomes necessary to revise or modify any part of this DQ, an addendum will be posted on www.elevatequantum.org. It shall be the responsibility of the Bidder to check the website periodically to see if any modifications have been issued. Failure to retrieve such modifications, and include their provisions in your bid response, may result in your bid being disqualified.

**AWARD:**

The factors to determine the award of this DQ shall be as follows in no order of precedence:

1. Pricing.
2. Delivery / service time or schedule.
3. Equipment’s specifications.
4. Vendor qualifications.
5. Vendor service and maintenance capabilities.
6. Vendors located within the Tech Hub designated states of Colorado, New Mexico, and Wyoming will be given preference.
7. The bid that is most advantageous for EQ.

EQ may evaluate the bids received to bid responsiveness, bidder responsibility, and, at the EQ opinion, other relevant factors.

The bid tab will be posted on www.elevatequantum.org.

**PURCHASE ORDER TERMS:**

After award, an EQ Purchase Order will be offered to the successful Bidder. Specifications, requirements, terms, and conditions of this solicitation shall be considered incorporated into the resulting Purchase Order, unless specified otherwise in the Purchase Order. The contents of the bidder’s response will become contractual obligations of the Purchase Order. Failure of the selected Bidder to accept these obligations in a Purchase Order may result in cancellation of the order and award to another Bidder.

In the event that the Bidder’s forms (or parts of forms) are included in the Bidder’s response and subsequently included as attachments or exhibits to the final Purchase Order, the Bidder agrees that, where there are contradictions or inconsistencies, the terms of the Purchase Order shall always supersede and control those of any such attachment or exhibit.

**SIGNATURE:**

|  |  |
| --- | --- |
| Bidder’s Legal Name: |  |
| Printed Name of Authorized Representative: |  |
| Signature of Authorized Representative: |  |
| Title: |  |
| Telephone: |  |
| Email: |  |
| Date of Signature: |  |

**EXHIBIT A – INSURANCE REQUIREMENTS**

**Summary of Requirements:**

The COI should show the following:

Legal Name: Elevate Quantum

Address: 7100 N Broadway, STE #1Q, Denver, CO, 80221

1) **Worker’s Compensation** – (a) Coverage A (workers’ compensation) at statutory limit; and (b) Coverage B (employers liability) at $100,000

2) **General Liability** – (a) $1,000,000 each occurrence; (b) $1,000,000 general aggregate; (c) $1,000,000 products and completed operations aggregate; (d) $1,000,000 personal/advertising; $50,000 fire damage (any one fire); and $5,000 medical payments (any one person)

3) **Automobile Liability** – (a) $1,000,000 bodily injury/property damage (each accident); and (b) personal injury protection at the statutory limit

4) **Additional Insured** - Elevate Quantum shall be named as additional insured on all Commercial General Liability and Automobile Liability Insurance policies

5) **Cancellation** - policies shall include provisions preventing cancellation or non renewal without at least 30 days prior notice

6) **Subrogation Waiver** - shall include clauses stating that each carrier shall waive all rights of recovery, under subrogation or otherwise, against Contractor or Elevate Quantum, its agencies, institutions, organizations, officers, agents, employees, and volunteers

Any COIs not stating Elevate Quantum as an additional insurance, and showing 30 day notice of cancellation and waived subrogation will not be accepted.