



Request for Quotation (RFQ) for the supply of a portable metrology-grade data acquisition solution system

RFQ No: 9294/28/04/2021

Date of issue:	14 April 2021
Closing Date and Time:	28 April 2021 at 16h30
Tender submission:	For submission of quotations or enquiries: tender@csir.co.za
Category:	Software License

1 INVITATION FOR QUOTATION

Quotations are hereby invited for the provision of a portable metrology-grade data acquisition solution system

2 QUOTATION REQUIREMENTS

The minimum specification required for Software and Technical parameters are mentioned below:

Tenderers are required to address the following minimum feature requirements:

- A total turnkey solution – The solution must be supplied as an end-to-end solution and run at optimum level with the appropriate hardware and software
- The device must be portable and weight less than 1 Kg
- Metrology grade accuracy – Must demonstrate accuracy of 0.030mm or be even better accuracy.
- Measurement resolution – Must demonstrate resolution of 0.030mm or be even better resolution.
- Volumetric accuracy – Must not deviate from 0.020mm + 0.060mm/m or be even better accuracy.
- Measurement rate – Should be able to capture 480000 measurements/s as a minimum.
- Measurement range: 10m

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This is not a Purchase Order.

- Camera FPS of 120fps or better
- Inspection – The solution must be able to carry out Part-to-CAD analysis, GD&T together with simple inspection without CAD data.
- Reverse Engineering – Solution must be able to process scan data into watertight geometry, generate section curves and generate best fit surface directly of the scab data.
- Using CATIA on the #D experience platform so seamless data exchange would be required.
- Interoperability – The toolset should allow the sharing of data in the following neutral formats: IGES, STEP, STL, OBJ as a minimum requirement.
- Scanning mode: laser scanning and LED optical tracking
- Laser source:14 cross red laser lines,5 blue parallel laser lines, with high resolution image acquisition unit and a laser transmitter.
- Working distance of at least 300mm
- Deep of field of at least 250mm
- Can scan at outside as well as inside. It could also scan in a narrow space such as scan the cockpit and the car interior dashboard. Multiple equipment can scan at the same time. All the data are in the same coordinate system and no need to match.
- The selection of the point cloud density to control the size of the scan file.
- External environment such as direct sunlight has little effect on the scanning accuracy.
- Manage paint mirror surface as well as other black surface. Thus, the imaging enhancement is unnecessary.
- Support – Must include maintenance of both the hardware and software for a min of 2 year after warranty / guarantee period.
- Annual Calibration – The solution must be supplied with a clear certification plan for annual calibration.
- Critical Spares – Minimum of 1 x data & power supply, 500 magnetic targets and 20 000 sticker targets to be supplied in addition to basic bundle.
- Training – Formal and Accredited training by OEM and/or authorised distributor for 4 users and manuals for use of scanner, inspection and reverse engineering software must be provided for a min 2 years Ongoing technical support – Online & telephonic support with OEM and/or authorised distributor.

3 MANDATORY REQUIREMENTS

- Full specification from the equipment OEM meeting the minimum requirements under point 2 above
- Company must prove reverse engineering expertise
- Provide drawings of components using the proposed solutions
- Training to be provided for 4 users

4 ELIMINATION CRITERIA

- 4.1 Late submission of quotes
- 4.2 Failure to adhere to quotation specifications
- 4.3 Submission at the wrong location or incorrect email address (Please submit electronically to tender@csir.co.za)

5 EVALUATION CRITERIA

- 5.1 Selection of suppliers will be based on the 80/20 preference point system.
- 5.1 Provide a certified copy of a valid B-BBEE Certificate, or valid sworn affidavit indicating the B-BBEE Status level. B-BBEE certificate must be issued by SANAS accredited agency or a valid sworn affidavit in line with DTI regulations. (RSA suppliers only).
- 5.2 No B-BB-EE Status will equal to zero points.
- 5.3 Indicate CSD number (National Treasury Central Supplier Database) on quotation. If not registered yet on CSD, use www.csd.gov.za to register.
- 5.4 No order will be issued or no contract will be signed without a valid CSD number.

6 PRICING QUOTATION

- 6.1 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.
- 6.2 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable, etc.
- 6.3 Payment will be according to the CSIR Payment Terms and Conditions.

7 OTHER TERMS AND CONDITIONS

- 7.1 The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any CSIR employee or its representatives. Such an act shall constitute a material breach of the Agreement and the CSIR shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.
- 7.2 A validity period of 90 days will apply to all quotations except where indicated differently on the quote.

- 8 No goods and/or services should be delivered to the CSIR without an official CSIR Purchase order. CSIR purchase order number must be quoted on the invoice. Invoices without CSIR purchase order numbers will be returned to supplier.**
- 9 Note: This is not a Purchase Order.**

DECLARATION BY TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFQ No:

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / quotation specifications stipulated in RFQat the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the quotation.

I confirm that I am satisfied with regards to the correctness and validity of my quotation; that the price(s) and rate(s) quoted cover all the services specified in the quotation documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this quotation as the principal liable for the due fulfilment of this quotation.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other quotation.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this quotation.

NAME (PRINT)
CAPACITY
SIGNATURE
NAME OF FIRM
DATE

WITNESSES	
1
2
DATE:	