



ಭಾ. ಕೃ. ಅನು. ಪ - ಭಾರತೀಯ ತೋಟಗಾರಿಕಾ ಸಂಶೋಧನಾ ಸಂಸ್ಥೆ
ಹೆಸರಗಟ್ಟ ಕೆರೆ ಅಂಚೆ, ಬೆಂಗಳೂರು-560 089

भा.कृ.अनु.प.- भारतीय बागवानी अनुसंधान संस्थान
हेसरगट्टा लेक पोस्ट, बेंगलूरु - 560 089

ICAR-Indian Institute of Horticultural Research
Hesaraghatta Lake Post, Bengaluru - 560 089

EPABX: 080-23086100 Extn: 218 & 217

FAX: 080-28466291 – Email: purchase.iihr@icar.gov.in



F.No.5-100/2024-25/SP/IIHR/333058

Dated:14.11.2024

NOTICE FOR INVITING TENDER THROUGH E-PROCUREMENT

Online Bids are invited from interested firms under **two bid systems (Technical bid/financial bid)** for **Procurement of Genomics workflow solutions (1 no) at ICAR-IIHR H'ghatta Bangalore**. Manual bids will not be entertained.

Tender documents may be downloaded from e-procurement website of CPPP <https://eprocure.gov.in/eprocure/app> as per the schedule given in CRITICAL DATE SHEET as under:

CRITICAL DATE SHEET

| | |
|---|---|
| Tender No. | F.No.5-100/2024-25/SP/IIHR/333058 |
| Name of Organization | ICAR-INDIAN INSTITUTE OF HORTICULTURAL RESEARCH, Hesaraghatta, Lake Post, Bangalore |
| Date and Time for Issue/Publishing | 14.11.2024 at 05:00 PM |
| Document Download/Sale Start Date and Time | 14.11.2024 at 05:00 PM |
| Bid Submission start Date and Time | 14.11.2024 at 05:00 PM |
| Bid Submission End Date and Time | 04.12.2024 at 03:00 PM |
| Date and Time for Opening of Technical Bids | 06.12.2024 at 10:00 AM |
| Address for Communication | Senior Administrative Officer (Purchase), IIHR, Hesaraghatta Lake Post, Bangalore |

Sd/-

CHIEF ADMINISTRATIVE OFFICER (SG)

INSTRUCTIONS FOR ONLINE BID SUBMISSION

1. The Tender form/bidder documents may be downloaded from the <https://eprocure.gov.in/eprocure/app>. Online submission of Bids through Central Public Procurement Portal (<https://eprocure.gov.in/eprocure/app>) is mandatory. Manual/Offline bids shall not be accepted under any circumstances.
2. Tenderers/bidders are requested to visit the website <https://eprocure.gov.in/eprocure/app> regularly. Any changes/modifications in tender enquiry will be intimated by corrigendum through this website only.
3. In case, any holiday is declared by the Government on the day of opening, the tenders will be opened on the next working day at the same time. The Council reserves the right to accept or reject any or all the tenders.
4. The Firms are required to deposit (in original) **EMD of Rs.2,55,000/-** in the shape of Demand Draft in favour of **THE DIRECTOR, ICAR, UNIT-IIHR payable at Bangalore** may be addressed to **Senior Administrative Officer(Purchase), IIHR, Hesaraghatta Lake Post, Bangalore-560089** on or before **04.12.2024 by 3:00 PM**.
5. **Please note that only online Bids will be accepted.**
6. Bidders need not to come at the time of Technical as well as Financial bid opening at IIHR. They can view live bid opening after login on CPPP e-procurement portal at their remote end. If any dispute arises, Within Bengaluru Jurisdiction only.
7. The firms are also required to upload copies of the following documents for Technical eligibility and Evaluation: -
 - Technical Bid**
 1. Scanned copy of MSME or Udyog Aadhar or NSIC is a must for EMD Exemption if eligible, otherwise firms have to furnish EMD.
 2. Scanned copy of valid firm's registration certificate from registered of companies
 3. PAN Card copy
 4. GST Number with Registration Certificate
 5. Bank details of the firm.
 6. Income Tax Returns for the last three years (2021-22,2022-23,2023-24).
 7. Profit and loss account & Balance Sheet which are audited & duly certified by the Chartered Accountant for the last three years (2021-22,2022-23,2023-24).
 8. Turnover of the business should be Rs.2.50 Crore per year (2021-22,2022-23,2023-24). And **Chartered Accountant certified profit and Loss account; Balance sheet to this effect may be enclosed.**
 9. **Tender acceptance letter (Annexure-V) is mandatory.**
 10. **Latest copies of the GST return for six months (January,2024 to June,2024)**

□ **Financial Bid:-**

- a) Price Bid as BOQ XXX.xls
- b) **Evaluation criteria: Tender will be awarded to the lowest quoted Firm among those firms qualified in the Technical Bid. In case, two or more firms quote the same amount in r/o all the items work together as a whole, then the tender will be awarded to the Firm which has got more average turnover in the last 3 years, based on IT returns/Profit & Loss account/Turnover duly certified by the CA and uploaded along with Tender through CPP.**

S/d
CHIEF ADMINISTRATIVE OFFICER (SG)

Terms & Conditions

1. The tenderer shall quote rates, which will include the supply, installation & other incidental charges. GST, if any, should be indicated separately.
2. The rates should be quoted as per the BOQ uploaded on the CPP Portal (reference may be obtained from Annexure-III). GST, if any, should be indicated separately. It must be noted that the contract shall be awarded to the firm which fulfils all the required terms and conditions and remains L-I for **Total cost**.
3. The firm must also possess valid PAN No. & GST registration number and a copy of the same must also be enclosed with the tender document.
4. **Latest copies of the GST return for six months (January,2024 to June,2024)**
5. Copy of Income Tax Return Statement may be furnished for the Financial year 2021-22,2022-23,2023-24.
6. Profit and loss account & Balance Sheet which are audited & duly certified by the Chartered Accountant for the last three years (2021-22,2022-23,2023-24).
7. **Turnover of the business should be Rs.2.50 Crore per year (2021-22,2022-23,2023-24). And Chartered Accountant certified profit and Loss account; Balance sheet to this effect may be enclosed.**
8. Modification in the tender documents after the closing date is not permissible.
9. The successful firm shall **commence work** within 10 days from the date of confirmed **work order** and if the work not completed in time then EMD shall be forfeited. The rates quoted shall be valid for one year from the date of opening of tender.
10. The contractor/bidder or his representative may contact the undersigned at **Tel. No. 080-23086100 Extn: 217 & 211** for any further clarification. No variation in terms and quality of the items/specifications shall be entertained or else EMD/Security deposit shall be forfeited.
11. The bidder is advised to visit the site of works at his own expenses and obtain all information that may be necessary for preparing the quotation. Submission of quotation is acceptance by the tenderer that he has inspected the site or he is aware of all conditions.
12. The Director, ICAR-IIHR, shall have the right to reject all or any of the offers, accept more than one offer, and assign part of the job without assigning any reason.
13. Merely quoting of lowest rates does not mean that order shall be given to that firm. The competent authority will finally decide on the basis of quality & performance of past installations.
14. The Firms are required to deposit (in original) an **Earnest Money Deposit of Rs.2,55,000/-** amount mentioned against item in the form of Demand Draft from any of the Commercial Bank in favour of **THE DIRECTOR, ICAR, UNIT-IIHR payable at Bangalore** may be address to Senior **Administrative Officer (Purchase), IIHR, Hesaraghatta Lake Post, Bangalore-560089 on or before 04.12.2024 by 03:00 PM**. No quotation shall be considered without the earnest money deposit. Demand draft drawn in favour of any officer other than 'THE DIRECTOR, ICAR UNIT-IIHR payable at Bangalore' will not be accepted and the tender will be rejected. The earnest money will be refunded only after the finalization of the procurement and no interest will be paid on earnest money. The request letter for refund of EMD & performance security is to be submitted by the firm.
15. Rates once finalized will not be enhanced/reduced during the currency of the contract.
16. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded, for whatsoever reason(s), to honour the contract, the earnest money /performance security deposited would be forfeited.

17. The Director, ICAR-IIHR reserves the right to cancel the contract at any time during the currency period of the contract without giving any reason.
18. The firm, to whom the tender will be awarded, will have to deposit the performance security equal to 3% of the total amount at the time of installation of equipment. If the services are not found to be satisfactory, the performance security is liable to be forfeited. No interest will be paid on performance security. If the services are not found to be satisfactory, the performance security is liable to be forfeited. No interest will be paid on performance security.
19. If any dispute(s) arises between IIHR and the firm with reference to the contract, IIHR will decide it and its decision will be binding on the firms.
20. Bid Validity: 90 days
21. Payment: - No advance or part payment will be given. The payment will be released after satisfactory completion of the work and certificate from the Indentor/Engineer.
22. **The supplier/firm has to submit the GST return for having remitted the GST amount paid by the institute to the concerned authority within 30 days from receipt of payment from IIHR, otherwise their EMD and SD/PS will not be released and such firms shall be blacklisted.**
23. **GST extra as applicable should be indicated separately in the column provided. Otherwise such quotes will be rejected.**

Payment Terms: In order to facilitate for speedy settlement of payment you are requested to Furnish the following details as below:

1. **Name of the firm:**
2. **Name of the Bank:**
3. **IFSC Code of Bank:**
4. **Name of the Account & Account No.:**
5. **Branch Code:**
6. **Amount to be paid:**
7. **E-mail address of the party:**
8. **GST No. and Pan No. Copies**

‘Terms & Conditions are acceptable’

Dated

(Authorized signatory of the firm)

Annexure-III

(Reference for BOQ) (To be quoted in format provided on CPP Portal)

Price bid for: **Procurement of Genomics workflow solutions (1 no) @ ICAR-IIHR H'ghatta.**

| Sl. No. | Name of item | Quantity | Per unit price* (in figures/words) (as per BOQ) |
|---------|--|----------|---|
| 01 | Procurement of Genomics workflow solutions (1 no) @ICAR-IIHR H'ghatta | 01 Unit | |

*Annexure-VIII

- Items should be of reputed make and suitable for high end elite users
- GST extra as applicable should be indicated separately in the column provided. Otherwise such quotes will be rejected.**
- **ICAR-IIHR , Bangalore.**

Note: The above mentioned Financial Proposal/Commercial bid format is provided as BoQ_XXXX/xls along with this tender document at <https://eprocure.gov.in/eprocure/app>. Bidders are advised to download this BoQ_XXXX.xls as it is and quote their offer/rates in the permitted column and upload the same in the Financial bid. **Bidder shall not tamper/modify downloaded price bid template in any manner.** In case if the same is found to be tempered/modified in any manner, tender will be completely rejected and EMD would be forfeited and tenderer is liable to be banned from doing business with IIHR.

Annexure-IV

EPABX: 080-23086100 Extn: 218 & 217
FAX: 080-28466291 - Email: purchase.iibr@icar.gov.in



ICAR-INDIAN INSTITUTE OF HORTICULTURAL RESEARCH

HESSARAGHATTA LAKEPOST, BANGALORE-560 089

Name of the Firm _____

Registered/Postal Address _____

| | | |
|---|---|--|
| 1 | Permanent Account Number (PAN) | |
| 2 | GST Registration No. | |
| 3 | Bank Details | |
| a | Bank Name | |
| b | Branch Address | |
| c | Account Number | |
| d | Type of account (current/saving) MICR No. | |
| e | IFSC Code | |

Date:

Name of the Authorized Signatory

Place:

Stamp & Signature

TENDER ACCEPTANCE LETTER
(To be given on Company Letter Head)

Date:

To,
The Director,
ICAR-IIHR,
Hesaraghatta Lake Post,
Bangalore-560089.

Sub: Acceptance of Terms & Conditions of Tender.

Tender Reference No. _____

Name of Tender/Work:

Dear Sir,

1. I/ We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/work' from the web site(s) namely:

As per your advertisement, given in the above mentioned website(s).

2. I/We hereby certify that I/We have read the entire terms and conditions of the tender documents from Page No. _____ to _____ (including all documents lime annexure(s), schedule(s), etc...) which form part of the contract agreement and I/We shall abide hereby the terms/conditions/clauses contained therein.
3. The corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while submitting this acceptance letter.
4. I/we hereby unconditionally accept the tender conditions of above mentioned tender documents/corrigendum(s) in its totality/entirely.
5. I/we do hereby declare that our Firm has not been black-listed/debarred by any Govt. Department/Public sector undertaking.
6. I/we certify that all information furnished by our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject that bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

Yours Faithfully,

(Signature of the Bidder, with Official Seal)

INSTRUCTIONS FOR ONLINE BID SUBMISSION

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at <https://eprocure.gov.in/eprocure/app>.

REGISTRATION

- Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL <https://eprocure.gov.in/eprocure/app>.) by clicking on the link ‘**Online bidder Enrollment**’ on the CPP Portal which is free of charge.
- As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.
- Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.
- Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (class II or Class III certificates with signing key usage) issued by any certifying authority recognized by CCA India (e.g. Sify/nCode/eMudhra etc.) with their profile.
- Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC’s to others which may lead to misuse.
- Bidder then logs in to the site through the secured log-in by entering their users ID/password and the password of the DSC/e-Token.

SEARCHING FOR TENDER DOCUMENTS

- There are various search options built in the CPP Portal. To facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective ‘My Tenders’ folder. This would enable the CPP Portal to intimate the bidders through SMS/e-mail in case there is any corrigendum issued to the tender document.
- The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

PREPARATION OF BIDS

- Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents- including the names and content of each of the document that need to be

submitted. Any deviations from these may lead to rejection of the bid.

- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/schedule and generally, they can be in PDF/XLS/RAR/DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use 'My Space' or 'Other important Documents' area available to them to upload such documents. These documents may be directly submitted from the 'My Space' area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

SUBMISSION OF BIDS

- Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other technical issues.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- Bidder has to select the payment option as 'offline' to pay the tender fee/EMD as applicable and enter details of the instrument.
- Bidder should prepare the EMD as per the instructions specified in the tender document. The original should be posted/couriered/given in person to the concerned official, latest by the last date of bid submission or as specified in the tender documents. The details of the DD/any other accepted instrument, physically sent, should tally with the details available in the scanned copy and the data entered during bid submission time. Otherwise the uploaded bid will be rejected.
- Bidders are requested to note that they should necessarily submit their financial bids in the Format provided and no other format is acceptable. If the price bid has been given as a standard BoQ format with the tender document, then the same is to be downloaded and to be filled by all the bidders. Bidders are required to download the BoQ file, open it and complete the white coloured (unprotected) cell with their respective financial quotes and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without changing the filename. If the BoQ file is found to be modified by the bidder, the bid will be rejected.
- The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 128 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric, encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- Upon the successful and timely submission of bids (i.e. after clicking 'Freeze Bid

Submission' in the portal), the portal will give a successful bid submission message and a bid summary will be displayed with the bid no. and the date and time of submission of the bid with all other relevant details.

- The bid summary has to printed and kept as an acknowledgement of the submission of the bid.

ASSISSTANCE TO BIDDERS

- Any queries relating to the tender documents and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contract person indicated in the tender.
- Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

Annexure-VII

Details of Equipment& EMD

| Sl. No. | Purchase of item | Qty | Earnest Money in INR | File. No. for reference |
|---------|--|---------|----------------------|----------------------------------|
| 01 | Procurement of Genomics workflow solutions (1 no) @ICAR-IIHR H'ghatta | 01 UNIT | Rs.2,55,000/- | F.No.5-100/2024-25/SP/IIHR-33058 |

Note:

- 1) EMD defined on to the Portal is MINIMUM. Bidder has to submit the EMD as per item for which quoting for.
- 2) Scanned copy of MSME or Udyog Aadhar or NSIC is a must for EMD Exemption if eligible, otherwise firms have to furnish EMD

*** ICAR-IIHR, Bangalore, Karnataka.**

TECHNICAL SPECIFICATION FOR: Procurement of Genomics workflow solutions (1 no) at Block-III @ ICAR-IIHR H'ghatta.

Tissue lyser systems: -

1. The system should offer processing of complete range of plant samples including, Leaf, seed, Root and fruit samples
2. Should offer two Adapters for fast simultaneous disruption of 24 X 2ml, 96 well adapters and 2 X 10ml grinding Jar through high-speed shaking with stainless steel beads (both 7mm, 5mm, 2mm) which slightly beat and grind samples
3. Processing of samples should take less time (as less as 2-10 minutes)
4. Should have flexibility of effective disruption and homogenization both by using liquid nitrogen or in frozen Condition or without Liquid Nitrogen, Should be possible to get Reproducible results with difficult-to-lyse tissues
5. Should have provision to avoid cross contamination
6. Should be able to disrupt multiple biological samples through high-speed bead beating in plastic tubes with stainless steel or glass or tungsten carbide beads.
7. Vendor should provide user manual with pre validated protocols for Lysis of different plant sample types
8. Instrument and Accessories (Adapters) should be from Single Manufacturer only
9. Instrument protocol should allow entering multiple steps under single protocol with reference to time and oscillations in order to avoid manual intervention in the process.
10. System should have the Digital settings and control of disruption time and vibration frequency intervals
11. The manufacturer must have good number of installations across INDIA at least 20 or above (evidence should be provided)
12. The Vendor should have a good service record and application support back up to provide an Effective Application related troubleshooting and support (evidence should be provided)
13. Vendor should provide three set of 7mm, 5mm stainless steel beads or glass or tungsten carbide along with the system

Nucleic Acid Extraction: -

1. The instrument should perform automated, medium-to high-throughput purification(8- 96 or higher samples of nucleic acids such as aspirating, dispensing, filtering, and sequential transfer of liquids for Extraction of DNA From complete range of samples
2. The instrument should deliver high performance and reliability, enabling purification of high-quality nucleic acids from 8–96 samples or higher per run, in increments of 8 samples.
3. The instrument features should ensure reliable purification of Nucleic Acid and minimize the risk of contamination.
4. The Extraction of Nucleic Acids should be based on Silica membrane technology, the manufacturer should have specific kits for DNA Extraction for each type of samples with pre validated protocol in the system software or it is amenable to use open source of DNA extraction Kits and reagents.
5. The software of the system should be flexible to edit the protocol at every step as per user requirement to get required yield of the DNA, RNA and Viral RNA
6. The vendor should provide specific and dedicated plastic ware for the instrument along with chemistry for 15000 samples.
7. The lid of the instrument should provide both an isolated enclosure for performing purification and safety mechanisms; like lid incorporates a magnetic sensor to determine whether the lid is closed or not. Under no circumstances should this sensor be bypassed, lid must be closed for the software and hardware to initialize upon start-up and for a run to proceed.
8. A UV lamp in the instrument lid and in built HEPA Filter, should provide efficient worktable decontamination and helps to prevent contamination.
9. The instrument lid may remain open when calibrating the position and height of plates, It Should not interfere with robotic arm movement during these calibrations and keep all body parts out of reach of the robotic arm while it is moving.
10. Liquid-handling tasks should be performed by the multichannel pipetting head, which provides a motor-driven, backlash-compensated pipetting mechanism. Tips attach to the pipette barrels of the pipetting head.
11. The instrument vacuum chamber should be composed of two separate compartments for waste and elution. This configuration should be one of many measures that minimize sample cross-contamination during purification.
12. The waste sink/mat support, located in the waste side of the vacuum chamber, should provide support for the silicone mat that seals the capture plate and channels the waste from each well in the plate separately to prevent cross-contamination.

13. The vacuum control station should be an integral component of the instrument. It should provide vacuum to the vacuum chamber for processing. The vacuum should be precisely controlled by the user using the instrument Software.

14. The instrument should be operated through a compatible laptop provided by the vendor. The software should be user friendly; the standard protocol for the nucleic acid purification should be scripted.

15. The instrument should have fully integrated solution and vendor should provide reagents, plastic ware for minimum 15000 samples and optimized protocols for nucleic acid purification from virtually any type of sample.

16. Manufacturer of the system should have validated kits for Plant DNA Extraction

17. Electrical Requirements: - As per Indian Standard laboratories

18. The vendor should provide training for 2-3 users of the lab

Advance Gel electrophoresis:

1. Automated system for the quality control of biomolecules viz., Nucleic Acids samples and various genotyping applications like High-resolution genotyping, Fast single or multiplex PCR screening QC of cell-free DNA, NGS library QC, Single amplicon analysis (e.g., HLA typing), RNA quality checks.

2. System capable of processing 12-96 samples at a time

3. Walkaway sample processing using ready-to-run gel cartridges and the cartridge capacity will be atleast 1200 samples per one cartridge.

4. Software Features should have Calculation of Relative Fluorescence Intensity, Smear analysis, Peak calling, RNA integrity Score, Mean size selection of Peaks & Electropherogram and Gel images

5. Resolution of fragments smaller than 500 bp with a 3-5 bp difference down to 5 pg/μl for DNA or 50 pg/μl for RNA

6. Analyze DNA fragments as small as 15 bp in 3 minutes for 12 samples. Analyze RNA fragments as small as 200 nt in 10 minutes for 12 samples.

7. Limit of detection down to 5 pg/μl for DNA or 50 pg/μl for RNA

8. Monitor runs remotely from outside the lab via optional software on the instrument

9. Less than 0.1 μl per analysis, minimizing sample usage for further downstream Analysis

10. The regulated N2 minimum input pressure must be 50 psi (345 kPa) and the maximum input pressure should not exceed 75 psi (517 kPa).

11. Should be provided with a computer with at least 2.3 GHz CPU, Minimum 500 GB free hard drive capacity, NTFS formatted · At least 8 GB RAM · 1920 x 1080 screen resolution or higher · USB port · Pointer device (mouse or similar) · latest Windows (64 bit or more) with minimum required version 1607 · Ethernet or Wi-Fi network

adapter in the case of QIASphere usage

12. the instrument should be open system can accept different types of plates and strip tubes and to avoid contamination, system should not use tips to load the sample and manual tip loading must be avoided.

13. (door closed) Width: 372 mm (14.64 in.) Height: 408 mm (16.06 in.) Depth: 572 mm (22.44 in.) (doors open) Width: 372 mm (14.64 in.) Height: 599 mm (23.58 in.) Depth: 572 mm (22.44 in.)

14. Pollution level 2

15. class 3K2 (IEC 60721-3-3)

16. USB2, 5V, 500 mA

17. Warranty: 03 year and CMC for 3years after completion of warranty period

Sd/-
CHIEF ADMINISTRATIVE OFFICER(SG)