

**All-India Institute of Medical Sciences**  
**Ansari Nagar, New Delhi-29**  
**(RESEARCH SECTION)**

**Ref. No. 39/Prop/Micro/LD/2019-20/RS**

**Dated: 28.01.2020**

**Subject: Purchase of Quant Studio 5 Real Time PCR System for the Deptt. of Microbiology, AIIMS, New Delhi-29 on proprietary basis- Inviting comments thereon.**

\*\*\*\*\*

The request has been received from Dr. Lalit Dar, Deptt. of Microbiology, AIIMS to purchase the subject item from **M/s Vision Diagnostic (India) Pvt. Ltd. (Mfg. by M/s Thermo Fisher Scientific, USA)** on proprietary basis. The proposal submitted by **M/s Vision Diagnostic (India) Pvt. Ltd.** and Performa Invoice and Departmental PAC certifications are attached.

The above documents are being uploaded for open information to submit objections, comments, if any, from any manufacturer regarding proprietary nature of the equipment/item within issue of 15 days giving reference **No. 39/Prop/Micro/LD/2019-20/RS**. The comments should be received by office of Stores Officer (RS), Research Section at AIIMS on or before **12/02/2020 upto 12:00 p.m.,** failing which it will be presumed that any other vendor is having no comment to offer and case will be decided on merits.

**STORES OFFICER (RS)**

**Encl: Related documents enclosed.**

**1. PAC Certificate enclosed.**

**2. Performa Invoice**

## QuantStudio 5 Real-Time PCR System, ThermoFisher Scientific (Proprietary Item)

### Technical specifications

1. The system should be an automated integrated system for both real-time PCR and post-PCR (end-point) analysis using in-built multiple Peltier based PCR machine.
2. The system should be capable to analyze 96 samples simultaneously in any of the following formats: 96-well plate with optical adhesive cover, 96-well plate with optical flat caps, 8-tube strips and individual tubes
3. The system should be a standalone system i.e. it should have advance Touch Screen LCD feature to avoid dependency on computer for operation with 10GB onboard memory of at least 1000-2000 runs. However, the system should come along with branded laptop for system control, operation, analysis, net-working of multiple system and a have USB port for data export to Power point, Excel or JPEG file formats.
4. The instrument can be customized, through the touch screen which should allow the user to create a run from the template, run an experiment, viewing the amplification plot and also pause the run in progress. During the pause the user can open/ close the block drawer to access samples. The user can resume the run from the point at which it was paused from the touch screen.
5. Instrument's touch screen interface should allow for editing of thermal protocols, including editing of individual PCR stages, individual PCR steps, block zones settings, Auto Delta settings, programmable pause settings, temperature settings, step duration settings, reaction volume settings, heated cover temperature, and ramp rate settings.
6. System should support minimum recommended reaction volume of 10  $\mu$ L and thermal cycling conditions to eliminate optimization of PCR conditions for running the templates from different sources simultaneously
7. The system must have flexibility to run multi user samples with more than 5 specific annealing temperature in a single run. It should have more than 5 independent temperature zone.
8. The quoted system should support the temperature range from 4°C to 100°C.
9. The system should be an open platform in terms of reagents as well as consumables
10. System should have 6 excitation and emission filter sets to enable collection of up to 21 unique combinations of wavelengths during a single run for multiplexing on the 96-well block instrument.

1g. 1 of 3

Megh  
P  
[Signature]  
[Signature] [Signature]  
[Signature]

11. The system should have dyes calibrated for FAM/ SYBR Green, VIC/ JOE/ HEX/ TET, ABY/ NED/ TAMRA/ Cy3, JUN, ROX/ Texas Red, Mustang Purple, Cy5/ LIZ, CY5.5 dye, so that the user can use any of these dyes in an experiment without needing to recalibrate the instrument, if there is a change to the assay's reaction volume or reaction vessel. The calibration of new dyes without hardware change should also be possible.
12. The system should have block ramp more than 6C/sec, and run time less than 35 minutes.
13. System should support various real-time quantitative PCR applications, including gene expression analysis, using relative standard curve, comparative Ct ( $\Delta\Delta C_t$ ) for relative quantitation, standard curve for absolute quantitation, allelic discrimination (SNP), dissociation curve analysis, pathogen detection, multi-plate with multiplex capability for gene expression/ genotyping study.
14. System should have option to analyze data by online web browser based software or cloud based by which user can access data with any browser or any device.
15. System must be supplied with license software which includes statistical analysis tools like Box-Whisker plots to assess Ct distribution, scatter plots and heat maps to assess sample correlation and quality, gene expression analysis, using standard curve, comparative Ct for relative quantitation, standard curve for absolute quantitation, allelic discrimination (SNP), dissociation curve analysis, pathogen detection and multi-plate with multiplex capability for gene expression/ genotyping study
16. System should have data acquisition by whole plate imaging
17. The System should utilize a highly advance board spectrum light source white LED for the excitation which offer more dye capability and Camera for detection. The software should utilize a multicomponenting algorithm to provide solution for multiple dye signals, to enable the simultaneous detection of multiple fluorophores with reduced cross-talk.
18. System should detect differences in target quantity as small as 1.5-fold in singleplex reactions, and should have 10 logs of linear dynamic range.
19. The necessary consumables to perform real-time quantitative PCR and assays (TaqMan MGB probes), including sample preparation reagent, Real Time PCR reagents and plastic wares should be available with same vendor and price for the next 5 years should be quoted. Further, the supplier should also be able to design and provide the TaqMan assays for the DNA/ small RNA (custom assays) templates of our interest.
20. The normalization of reaction due to non-PCR related fluctuations should be possible by using any calibrated dye.
21. The quoted system must have full license for PCR process.

19.2.2023

Megh

Dr. J.

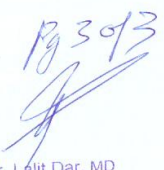
Dr. A.


Dr. V.

Dr. S.

22. The vendor should have own application support laboratory in India, preferably in Delhi/ NCR for local & efficient after sales service-support.
23. System should be supplied with a branded laptop.
24. Should be provided with five years comprehensive warranty from the date of installation. Should provide sale service quote for annual comprehensive maintenance contracts for next five years after completion of warranty period.


**The committee approved the specification of QuantStudio 5 Real-Time PCR System**


19303  
  
 डॉ. ललित दार / Dr. Lalit Dar, MD  
 आचार्य एवं प्रभारी, विषाणु विज्ञान अनुभाग  
 Professor & in-charge, Virology Section  
 सूक्ष्म जीव विज्ञान विभाग / Department of Microbiology  
 अ.भा.आ.स., नई दिल्ली / A.I.I.M.S., New Delhi-110029

  
 आशीष चौधरी / Dr. Aashish Choudhary  
 सह-आचार्य / Associate Professor  
 विषाणु विज्ञान अनुभाग / Virology Section  
 सूक्ष्म जीव विज्ञान विभाग / Department of Microbiology  
 अ.भा.आ.स., नई दिल्ली / A.I.I.M.S., New Delhi-110029



डॉ. जयवोप सिद्धांत / Jayowop Siddhant  
 सह-आचार्य / Associate Professor  
 अस्पताल प्रशासन विभाग / Dept. of Hospital Administration  
 अखिल भारतीय आयुर्विज्ञान संस्थान/ AIIMS  
 अंसरी नगर, नई दिल्ली/ Ansari Nagar, N.D.-29

  
 डॉ. मेघा वृजवाज / Dr. Megha  
 सहायक आचार्य / Associate Professor  
 विषाणु विज्ञान अनुभाग / Virology Section  
 सूक्ष्म जीव विज्ञान विभाग / Department of Microbiology  
 अ.भा.आ.स., नई दिल्ली / A.I.I.M.S., New Delhi-110029

  
 सरोज कालेर झाहरिया / Saroj Kaler Jhalhria  
 अतिरिक्त आचार्य / Additional Professor  
 शरीर रचना विभाग / Dept. of Anatomy  
 अखिल भारतीय आयुर्विज्ञान संस्थान/ AIIMS  
 अंसरी नगर, नई दिल्ली/ Ansari Nagar, New Delhi-29



DR. IMMACULATA XESS  
 सहायक आचार्य / Associate Professor  
 सूक्ष्म जीव विज्ञान विभाग / Department of Microbiology  
 अ.भा.आ.स., नई दिल्ली / A.I.I.M.S., New Delhi-110029



Thermo Fisher Scientific  
Life Sciences Solutions Group  
3175 Staley road  
Grand Island, New York 14072 U.S.A.  
(716) 774-6700  
www.thermofisher.com

March 31, 2017

Re: Applied Biosystems™ QuantStudio™ 3 and 5 Real-Time PCR System Proprietary Features

Dear Valued Customer:

Thank you for your inquiry related to our Applied Biosystems™ QuantStudio™ 3 and 5 Real-Time PCR System Proprietary Features. Listed below are several US Patents and the features they cover with regards the QuantStudio™ 3 and 5 Real-Time PCR Systems:

US Patent	Area
8557566	Optical
7233393	Optical
7295316	Optical
7045756	Optical
8676383	Temperature
8572506	Algorithm/Software
8865473	Optical

If you have any further questions, please feel free to contact us.

Thank you for your continued support and interest in Thermo Fisher Scientific products.

Sincerely yours,

Levente Egry

Senior Product Manager  
Applied Biosystems QuantStudio™ 3 and 5 Real-Time PCR Systems  
Life Sciences Solutions

Thermo Fisher Scientific



TRUE COPY ATTESTED

O.P. SINGH  
Advocate  
Regd. No.-1680  
Notary Public  
Ghaziabad





Ref: VDIPL/2019-20/IR3583

Performa Invoice

Date: 13/01/2020

To,  
Prof. Lalit Dar  
Department of Microbiology  
All India Institute of Medical Sciences  
Ansari Nagar, New Delhi-110029

**Subject:- Submission of proposal for Quant studio 5 real time PCR on proprietary basis-**

Please find below our best possible prices of the following items for your kind consideration along with authorization letter, proprietary certificate, SO copy, price list and lowest price certificate are attached for your reference. Our Quoted model is from Life Technologies PTE.

Sl. No.	Cat No.	Description	Qty	Unit price INR
	A28139	<p><b>QuantStudio 5 Real-Time PCR System,* 96-well, 0.2 ml block</b> HSN CODE :</p> <p>The Applied Biosystems® QuantStudio® 5 Real-Time PCR System is designed for users who need an affordable, easy-to-use real-time PCR system that doesn't compromise performance and quality. The Simplified Design and Analysis software is ideal for both first-time and experienced users. When connected to the Thermo Fisher Cloud, the QuantStudio® 5 system provides access to your data wherever and whenever you want. Using proven OptiFlex® technology (featuring 6decoupled channels and white LED) and featuring six independent Veriflex® temperature zones, the QuantStudio® 5 system enables improved data accuracy and sensitivity for a broad range of genomic applications.</p> <p><b>Features of the QuantStudio® 5 system include:</b></p> <ul style="list-style-type: none"> <li>• Simplified instrument software with interactive touch screen for greater ease of use</li> <li>• Maximum ramp rate 6.5°C/sec</li> <li>• Multiplexing 96-well: up to 6 targets with 21 filter combinations</li> <li>• Proven OptiFlex® technology (6 decoupled channels with white LED) for trusted results</li> <li>• Secure cloud-based software option provides increased accessibility and storage options</li> <li>• User account management and Pause features for greater control of experiments</li> <li>• Sensitivity: Detect changes as little as 1.5-fold in target quantities</li> </ul>	01	42,86,574.00

Molecular Diagnostics Simplified

**Vision Diagnostic (India) Pvt. Ltd.**

Lucknow Correspondence  
2nd Floor, 2/675, Sector-L,  
LDA Colony, Kanpur Road  
Lucknow - 226012 U.P.  
Ph : 052-4016799

Corporate Office /Correspondence Address  
FFSR 9A & 9B , First Floor  
Ansal Premium Corporate Suits,  
Ansal Plaza, Sector-1  
Vaishali, Ghaziabad-201010(U.P.)  
Tel.: +91-120-43430000  
to 4343021 (22 Lines)  
info@vision-groups.com  
www.vision-groups.com

Regd. Office Delhi  
Plot No. 405, Ground Floor  
Patparganj Industrial Area,  
Patparganj, Delhi-110092  
Phone : 011-22159168, 22159172, 40509678,  
GSTIN : 07AABCV9939R1Z9





(An ISO 9001:2015 Certified Co.)  
CIN : U51397DL2005PTC132750



2	A30150	HRM Software v3.1 1 License	01	
3	4425562	MeltDoctor HRM Calibration Standard HRM Standard 20x and MMx 1mL	01	
4	4415440	HRM Master Mix, 5mL Master Mix Tube	01	
5	4352407	TAQMAN 18S Starter Kit	01	
6	4432382	96-well (Std) 0.2mL RNaseP Plate	01	
7	NPN	Computer	01	
Sub Total			42,86,574.00	
Discount @26%			11,14,509.24	
Total Price After Discount			31,72,065.00	

Warranty: 60 months from the date of Installation.

#### TERMS & CONDITIONS:

- Supply will be made from our Custom Bonded warehouse.
- GST @18% will be charge extra, Incase of DSIR GST will charged 5%.
- CDEC Certificate for Research Purpose (51/96) and DSIR certificate be required at the time of clearance.
- VALIDITY: Prices quoted are valid for 6 months from date of Performa Invoice.
- DELIVERY: 8-10 weeks after receipt of your confirm order.
- Payment Terms: As per AIIMS payment terms.
- TRAINING : Free of cost
- Comprehensive Warranty: 5 Years from the date of INSTALLATION.
- Installation: Will be done by our factory-trained engineer on free of cost basis.
- CMC Charges after 5 years of Warranty: 5% of Equipment cost per Years for next 5 years. GST will be charge extra.

Pre Installation Requisite will be made available to you after receipt of order acknowledgement

Thanking You,

Yours Faithfully,

For VISION DIAGNOSTIC (I) PVT.LTD.

AUTHORISED SIGNATORY

ision Diagnostic (India) Pvt. Ltd

icknow Correspondence  
d Floor, 2/675, Sector-L,  
A Colony, Kanpur Road  
cknow - 226012 U.P.  
: 052-4016799

Corporate Office /Correspondence Address  
FFSR 9A & 9B , First Floor  
Ansal Premium Corporate Suits,  
Ansal Plaza, Sector-1  
Vaishali, Ghaziabad-201010(U.P.)  
Tel.: +91-120-43430000  
to 4343021 (22 Lines)  
info@vision-groups.com  
www.vision-groups.com

Regd. Office Delhi  
Plot No. 405, Ground Floor  
Patparganj Industrial Area,  
Patparganj, Delhi-110092  
Phone: 011-29488888