

# **NEHRU SCIENCE CENTRE**

(A Unit of National Council of Science Museums)
Ministry of Culture, Govt. of India

# **TENDER DOCUMENTS**

# **FOR**

# SUPPLY & INSTALLATION OF LASER PROJECTORS

# AT

GOA SCIENCE CENTRE & PLANETARIUM, MARINE HIGHWAY, MIRAMAR PANAJI-403 001, GOA

(Tender ID: NSCM/18012/245/2024)

(राष्ट्रीय विज्ञान संग्रहालय परिषद की एक इकाई)/
(A unit of National Council of Science Museums)
डॉ. ई. मोजेस मार्ग, वरली, मुंबई-400018/Dr. E. Moses Road, Worli, Mumbai-400 018
Tel. No.022 24900518, E-Mail: spo@nehrusciencecentre.gov.in

#### **NOTICE INVITING E-TENDER**

#### TENDER No.NSCM/18012/245/2024

Online digitally signed e-Tenders are invited for the Supply & Installation of Laser Projectors at **Goa Science Centre, Panaji** strictly as per the Specifications, Quantity and Terms & Conditions. Vendors who have necessary infrastructure and financial capability of executing the order at a time may download the Tender Papers from Central Public Procurement Portal (CPPP): <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> or from the website <a href="http://ewww.nehrusciencecentre.gov.in">www.nehrusciencecentre.gov.in</a> of NSC Mumbai (NSCM) as per the following schedule:-

Bid document publishing Date	09.02.2024, 12.00 hrs	
Bid document download start date	09.02.2024, 12.30 hrs	
Bid document download end date	23.02.2024, 15.00 hrs	
Bid submission start date	09.02.2024, 12.30 hrs	
Bid submission end date	23.02.2024, 15.30 hrs	
Period of completion of work	30 Days	
Technical (Techno-Commercial) Bid opening date	26.02.2024, 16.00 hrs	
Supply & Installation Place	Goa Science Centre & Planetarium,	
	Marine Highway, Miramar,	
	Panaji-403 001	

The online Bids both Technical (Techno-Commercial) and Financial duly furnished in Cover-I and Cover-II respectively, should be uploaded by the due date and time as per the above schedule. The responsibility to ensure this lies with the Bidder. Off-line Tender shall not be accepted and no request in this regard will be entertained whatsoever. Online Technical (Techno-Commercial) Bids will be opened at the first instance in this Office at **16.00 hrs. on 26.02.2024.** Technical Evaluation as well as selection of Techno-commercially acceptable offers and at the second stage, the Financial Bids of only the Technically qualified Agencies will be opened at the date and time to be notified in the Portal later. The decision of NSCM regarding selection of eligible and qualified vendors/firms for opening the Financial Bids shall be final and binding on the Bidders.

Nehru Science Centre, Mumbai reserves the right to accept or reject any or all Tenders in full or part without assigning any reason whatsoever. NSCM shall also not be bound to accept merely the lowest Tender but the technical & financial capability and proven infrastructure to execute the work within the scheduled time frame etc., shall be of prime consideration for selection of the vendor.

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#### **GENERAL INFORMATION AND INSTRUCTIONS**

- 1. The instructions and specifications given herein will be strictly binding on the Tenderers and deviation, if any, makes Tender or Tenders liable to be considered invalid. Tenders incorporating additional conditions by the Tenderer are liable for rejection.
- 2. Bids shall be submitted online at CPPP website: <a href="http://eprocure.gov.in/eprocure.app">http://eprocure.gov.in/eprocure.app</a> Manual Bids shall not be accepted.
- 3. The instruction given in **Annexure-A** for "**Instruction for Online Bid Submission**" should be strictly followed during submission of the Bid.
- 4. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 5. Validity of Bids: The Bids should remain valid for acceptance for **90 days** from the date of opening.
- 6. Rejection of Bids: Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection. Conditional Tenders will be rejected. Non-compliance of applicable General Information and Instruction will disqualify the Bid.
- 7. The Tenderers should have Digital Signature Certificate (DSC) for filling up the Bids. The person signing the Tender documents should be authorized for submitting the online e-Tender.
- 8. The Financial Bid (BoQ) shall be filled in and signed by the authorized signatory online as per Proforma **Annexure-G** available at Central Public Procurement Portal e-Tender system website <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a>. Offline Financial Bid shall not be accepted.
- 9. Tender must be uploaded online by the Bidder in two separate covers marked Cover-I and Cover-II. The contents of Cover-I and Cover-II will be as follows:

#### Cover-I

- (i) Scanned Copy of **General Terms & Conditions** as detailed in **Annexure-B** duly signed with official stamp as a token of acceptance of the Terms & Conditions.
- (ii) The '**Declaration**' of the Bidder as detailed in **Annexure-C** duly signed by the authorized signatory with official stamp.
- (iii) **Technical (Techno-commercial) Bid** as per **Annexure-D** format duly filled in, stamped and signed by the authorized signatory.
- (iv) The **Technical Specification** as detailed in **Annexure-E** duly signed with official stamp as a token of acceptance for execution of the tendered job in accordance to the Specification of NSCM.

- (v) **Check List for Laser Projectors** as per **Annexure-F** duly filled in and signed by the authorized signatory with official stamp.
- (vi) Scanned Copy of the current and valid Trade License and Dealership Certificate, GST Certificate and other Certificates duly self-attested with official stamp.

In case the Bidder fails to submit any of the documents as stated above, the other part of their Tender i.e. 'Cover-II' shall not be considered for further download and shall be rejected straightway without any further reference. The Technical Bids and other documents i.e. 'Cover-I' will be downloaded and evaluated at the first stage to select the Techno-commercially capable and competent Bidders. At the second stage, Financial/Price Bids i.e. 'Cover - II' of only the Techno-commercially acceptable offers will be downloaded and evaluated for further ranking before awarding the contract. After opening of 'Cover-I', if all the Bids are found Techno-commercially unacceptable, the Financial (Price Bid) Bids i.e. 'Cover-II' submitted by the Bidders against this Tender shall not be opened/downloaded for obvious reasons.

#### Cover-II

- (i) The Financial Bid (as per given .xls format) i.e. Rate Quote Sheet in the form of attached BoQ Proforma shall be duly filled in, digitally signed and uploaded online by the Bidder.
- (ii) The authorities of Nehru Science Centre who does not bind themselves to accept the lowest Tender, reserves the right to reject or accept any or all Tenders wholly or partially without assigning any reason whatsoever.

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## TENDER No.NSCM/18012/245/2024

#### Instructions for Online Bid Submission

- 1. 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.
- **2.** More information useful for submitting online Bids on the CPP Portal may be obtained at https://eprocure.gov.in/eprocure/app

#### REGISTRATION

- 1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>) by clicking on the link "Online Bidder Enrollment" on the CPP Portal which is free of charge.
- 2) As part of the enrolment process, the Bidders will be required to choose a unique username and assign a password for their accounts.
- 3) 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.
- 4) 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.
- 5) 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.
- 6) Bidder then logs in to the site through the secured log-in by entering their user 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.

- 2) 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.
- 3) 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

- 1) Bidder should take into account any corrigendum published on the Tender document before submitting their bids.
- 2) 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.
- 3) 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.
- 4) 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**

- 1) 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 issues.
- 2) The Bidder has to digitally sign and upload the required Bid documents one by one as indicated in the Tender document.
- 3) Bidder has to select the payment option as "offline" to pay the Tender fee / EMD as applicable and enter detail of the instrument.
- 4) A standard Price Schedule format (BOQ) has been provided with the Tender document to be filled by all the Bidders. 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 in .xls format, open it and quote the Rate (the Basic Rate column) and GST in INR which is highlighted in the green colored (unprotected) cells with their respective financial quotes against all items given and fill 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 file name. If the BOQ file is found to be modified by the Bidder, the Bid will be rejected.

- 5) 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.
- 6) All the documents being submitted by the Bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the date. 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.
- 7) The uploaded Tender documents become readable only after the Tender opening by the authorized bid openers.
- 8) 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 & a Bid summary will be displayed with the Bid number and the date & time of submission of the Bid with all other relevant details.
- **9)** The Bid summary has to be printed and kept as an acknowledgment of the submission of the Bid. This acknowledgment may be used as an entry pass for any Bid opening meetings.

#### **ASSISTANCE TO BIDDERS**

- 1. Any enquiries relating to the Tender document and the Terms and Conditions contained therein should be addressed to the Tender Inviting Authority for a Tender or the relevant contact person indicated in the Tender.
- 2. 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. The contact number for the helpdesk is 1800 3070 2232.

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#### TENDER No.NSCM/18012/245/2024

# GENERAL TERMS AND CONDITIONS (GTC) FOR SUPPLY & INSTALLATION OF LASER PROJECTORS AT GOA SCIENCE CENTRE & PLANETARIUM, PANAJI STRICLY AS PER THEIR SPECIFICATIONS

1. Bidders should have necessary infrastructure and facilities so as to take up the job of supply and installation of the Tendered items strictly as per enclosed specification with required financial capability.

#### 2. Price:

The price and rates quoted/indicated in the enclosed 'BoQ (Offer Form)' shall include cost of all materials, transportation charges, installation charges etc. and all working accessories, tools and tackles, reliable standard testing equipment etc. and all incidental charges to supply and install the Laser Projectors at Goa Science Centre & Planetarium, Panaji. The rate of GST and any other charges/taxes to be imposed on the rate shall be clearly mentioned. Price and rate quoted shall be firm and fixed for the entire period of execution of the work order and no escalation of rate on any ground whatsoever shall be applicable.

3. The successful Tenderer shall submit the duplicate copy of the work order duly signed and stamped as a token of acceptance of the order within 7 (seven) days from the date of placement of the work order.

## 4. Time of Completion:

Time is the essence of the Tender. The entire work of supply and installation of Tendered item as per the Technical Specifications shall be completed at **Goa Science Centre & Planetarium**, **Panaji** within 30 days from the date of placement of order.

For non-compliance of any of the above terms and non-delivery of the Tendered items complete in all respects within the above-stipulated period, NSCM shall either cancel the order or impose a Penalty as detailed in Clause 5. Decision of Nehru Science Centre, Mumbai (NSCM) in this regard shall be final and binding on the successful Tenderers.

If it is noticed that the goods supplied do not conform to the specification of the order, the Centre shall have the right to reject the materials in part or full. The supplier shall be liable to replace the rejected materials within the stipulated time. Till the replacement is done, the rejected materials shall be lying at the risk cost and responsibility of the supplier. If the supplier do not arrange to replace the rejected materials within the stipulated time, the same may be disposed of at the risk of the supplier and in the manner which the Centre will deem fit. The Centre shall be entitled to retain the proceeds of the disposal either in part or in full towards expenses incurred on storage, handling and disposal of the materials. The Centre shall also be entitled to recover the expenses made by them on account of storage and handling of such rejected goods till the goods are removed from the premises of the Centre.

The authorities of the Nehru Science Centre reserves the right to amend, alter or modify the Terms and Conditions mentioned above, if necessary from time to time.

The authorities of Nehru Science Centre who does not bind themselves to accept the lowest Tender, reserves the right to reject or accept any or all Tenders wholly or partially without assigning any reason whatsoever.

The quantities specified in the Tender may be decreased or increased at the sole discretion of NSCM authorities.

## 5. Penalty Clause:

The successful Tenderer shall strictly observe the time allowed for carrying out the supply and installation of Tendered item as detailed in Clause No.4. The work shall, throughout the stipulated period of the contract, be proceeded with all the diligence (time being deemed to be the essence of the contract). If the successful Tenderer fails to complete the work in the stipulated time, the successful Tenderers shall pay to NSC, Mumbai an amount corresponding to 2% of the Total Contract Value or Actual Value of Work done, whichever is greater, for every week that the work may remain incomplete as per delivery schedule/completion time as stipulated in Clause No.4 subject to a maximum compensation of 10% of the Total Contract Value or Actual Value of Work done, whichever is greater and after such period, appropriate action will be taken by NSC, Mumbai as it may deem fit. NSC, Mumbai may extend the completion time/time of delivery of the tendered job/item at their discretion on the application of the successful Tenderer for such purpose provided that NSC, Mumbai considers the reasons for such extension as good, sufficient and acceptable. Decision of NSC, Mumbai in this regard shall be final and binding on the successful Tenderers.

Every effort should be made to complete the work by the successful Tenderer within the specified time schedule. In case the firm fails to comply with Clause No.4 i.e., the specified time schedule as per the finalized and accepted terms and conditions, NSCM shall have the right to either impose Penalty clause or cancel the order forthwith. The decision of NSCM in this regard shall be final and binding on the successful Tenderer.

## 6. Payment Terms:

No advance payment shall be made by the Centre under any circumstances. Payment shall be released within 30 (thirty) working days from the date of receipt of Invoice / Bills (supplies covered under Clause No.4) duly supported by receipted challan subject to satisfactory supply, installation and testing by the successful Tenderer and inspection report of the ordered materials issued by the competent authority of the Council and registration of the one year warranty with the manufacturer by the successful Tenderer.

- 7. Warranty: 03 (three) years comprehensive onsite warranty for the Laser Projectors to be supplied at Goa Science Centre & Planetarium, Panaji. The equipment delivered by the successful Tenderer should be pre-registered or shall be registered immediately after delivery with OEM/Manufacturers. Any service required to be provided during the Warranty or postwarranty period should be performed at Goa Science Centre & Planetarium, Panaji.
- 8. In case, the successful Tenderer refuses to accept the offer after finalization or does not comply with the Clause No.3 within 7 (seven) days from the date of placement of the order as per the finalized and accepted terms & conditions, the order shall be cancelled forthwith.
- 9. Technical Specifications of the tendered item are enclosed for guidance. However, if any ambiguity in the specifications is detected, it shall be promptly brought to the notice of NSCM for clarifications. The successful Tenderer without written approval/permission of NSCM shall make no deviation from the approved Drawings / Technical Specifications.

- 10. The ordered items are to be installed at the place decided by the Centre. Nehru Science Centre, Mumbai shall not be liable for injury of any employee who is deployed by the successful Tenderer within/outside the work-site for installation of the equipment. The successful Tenderer are liable to install the ordered products / equipment at site as per the directions and place shown to them.
- 11. Testing of the Products/Equipment shall be carried out by the successful Tenderer immediately after delivery. After successful testing, full payment will be released. However, the successful Tenderer shall carry out the work of final installation of the equipment at site at a later date as per the instructions of authorities of NSCM.
- 12. The successful Tenderer shall submit necessary trade and other licenses as may be required to carry out the tendered job and shall also be responsible for compliance of all rules and regulations, which may be in force from time to time by the appropriate authority at his/her own cost.
- 13. The successful Tenderer shall not under any circumstances whatsoever transfer wholly or partially the contract/agreement/work order to any other person(s)/firm/company or assign the agreement or benefits of this agreement to any other party for any reason whatsoever. Otherwise, the supply order will automatically stand cancelled.
- 14. Income Tax and Work Contract Tax shall be deducted at source, if applicable, from each bill/claim of the firm as per prevailing Government rules.
- 15. All disputes and differences between the successful Tenderer and NSCM of any kind, except quality of workmanship and materials, whatever arising out of or in connection with the order on the carrying out of the work (whether during the progress of the work or after their completion and either before or after the determination, abandonment or breach of the terms and conditions of the order) shall be referred to the sole arbitration of a person nominated by the Director General, National Council of Science Museums, whose decision in this regard shall be final and binding on both the successful Tenderers and NSCM.

The provisions of the Arbitration and Reconciliation Act, 1996 or any statutory modification or re-enactment thereof and of the rules made there under for the time being in force shall apply to arbitration's proceedings under this Clause.

## Annexure-C

# नेहरु विज्ञान केन्द्र/NEHRU SCIENCE CENTRE

(राष्ट्रीय विज्ञान संग्रहालय परिषद की एक इकाई)/
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#### TENDER No.NSCM/18012/245/2024

## **DECLARATION**

We do hereby accept the "General Terms & Conditions" as provided by the Nehru Science Centre, Mumbai along with the Tender documents for Supply & Installation of Laser Projectors at Goa Science Centre & Planetarium, Panaji strictly as per the specifications and also undertake to deliver and install the said products/equipments strictly as per the Technical Specifications as provided along with the Tender documents, in the event of placement of any order on us. Nehru Science Centre, Mumbai shall be at liberty to cancel the order in full or in part in the event of failure of any of the above declaration made by us.

Signature of the Bidder / Constituted Attorney

Address:

Official seal with date

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## TENDER No.NSCM/18012/245/2024

## **TECHNICAL (TECHNO-COMMERCIAL) BID**

NOTE: All Particulars / Informations should be given in the following format with complete details :

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	1.	Name & Address of the Firm/Bidder	
	2.	Telephone No. Mobile No.(to be available 24 hrs) Workshop at Panaji E-mail ID: Website:	
	3.	Background details of the Firm	
	4.	Manpower set up of the Firm	
	5.	Qualification of Professionals	
	6.	Past experience in such business for the last 3 years giving details of established clients, especially Government Offices  Submit certificate issued by such clients/govt. Offices for satisfactory	
	7.	executing of orders  (i) Whether capable to supply and installation of equipment / products strictly as per enclosed Technical Specification  (Please mention 'YES' or 'NO')	
		(ii) If it is mentioned 'NO' above, submit detailed deviation to be made from the enclosed Technical Specification.	
		(Extra sheet may be attached, if required).	

	(iii) If it is mentioned 'YES' above, inform number of days required for completion of the job	
	(iv) Whether having authorized dealership from the manufacturers of electronic equipments. If yes, give details and submit copies of valid dealership certificates.	
	(v) State whether the equipment to be offered by the Firm shall either come with/or in compliance with all the features as detailed in enclosed specification.  (State 'YES' or 'NO')	
8.	Submit the documentary evidence regarding execution of latest contract of similar nature and magnitude of minimum single order value of ₹3.00 Lakhs or above	
9.	Proof of financial status of the company/audited Balance Sheet for last 3 years indicating total turnover as well (Submit documentary evidence)	
10.	Whether agreed to accept 30 days credit payment Terms (Please mention 'YES' or 'NO')	
11.	Minimum time required to supply & install the Tendered item at Goa Science Centre, Panaji	
12.	State whether registered under GST. (Enclosed photocopy of certificates)	
13.	Whether agreed to supply and install the Tendered item as per enclosed Technical Specifications positively by 30 days (Please mention 'YES' or 'NO')	

I/We hereby declare that the above statements are true. I/We also declare that the decision of Nehru Science Centre, Mumbai regarding selection of eligible firms for opening of Financial Bid (Part-II) shall be final and binding on me/us.

Dated:	Official Seal
	Signature of the Tenderer/Constituted Attorney

## Annexure-E

# नेहरु विज्ञान केन्द्र/NEHRU SCIENCE CENTRE

(राष्ट्रीय विज्ञान संग्रहालय परिषद की एक इकाई)/
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## TENDER No.NSCM/18012/245/2024

# TECHNICAL SPECIFICATIONS FOR SUPPLY & INSTALLATION OF LASER PROJECTORS (02 NOS.) AT GOA SCIENCE CENTRE & PLANETARIUM, PANAJI

Specification	Value
Display Technology	3rd Generation Laser Phosphor Technology with
	up to a 30,000-hour lifespan
Display Color	1.07 Billion Colors
Resolution Support	VGA(640 x 480) to WUXGA RB(1920 x 1200)
Brightness	5,000 ANSI Lumens
Contrast Ratio	300000:1
Throw Ratio	1.13-1.47
Throw Distance	0.75-9.76m (100"@2.50m)
Optical Zoom	1.3X
Digital Zoom	0.8x-2.0x
Keystone Correction	Vertical +/-30°; Horizontal +/-30°
H/V Keystone Correction	4 Corner Adjustment
Aspect ratio - compatible	4:3,16:9,16:10
Horizontal Frequency	15K-102KHz
Vertical Scan Rate	24-120Hz
Image Size	30"-300" diagonal
IP rating	IP6x
Light Source	Laser Phosphor
Light Source Life	30,000 hours Normal
Connectivity	HDMI x2 (HDMI 1.4/ HDCP 1.4)
Power Supply Voltage	Power adaptor
Input	100~240V
Wall/Ceiling Mount	Yes

## **Annexure-F**

# नेहरु विज्ञान केन्द्र/NEHRU SCIENCE CENTRE

(राष्ट्रीय विज्ञान संग्रहालय परिषद की एक इकाई)/
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<u>डॉ. ई. मोजेस मार्ग, वरली, **मुंबई**—400018/Dr. E. Moses Road, Worli, Mumbai-400 018</u>

Tel. No.022 24900518, E-Mail: spo@nehrusciencecentre.gov.in

## TENDER No.NSCM/18012/245/2024

## **CHECK LIST FOR LASER PROJECTORS (02 Nos.)**

Specification	Value	Whether Complied (Yes/No)	If no, deviation
Display Technology	3rd Generation Laser Phosphor		
	Technology with up to a		
	30,000-hour lifespan		
Display Color	1.07 Billion Colors		
Resolution Support	VGA (640 x 480) to WUXGA		
	RB(1920 x 1200)		
Brightness	5,000 ANSI Lumens		
Contrast Ratio	3000000:1		
Throw Ratio	1.13-1.47		
Throw Distance	0.75-9.76m (100"@2.50m)		
Optical Zoom	1.3X		
Digital Zoom	0.8x-2.0x		
Keystone Correction	Vertical +/-30°; Horizontal +/-		
	30°		
H/V Keystone Correction	4 Corner Adjustment		
Aspect ratio - compatible	4:3,16:9,16:10		
Horizontal Frequency	15K-102KHz		
Vertical Scan Rate	24-120Hz		
Image Size	30"-300" diagonal		
IP rating	IP6x		
Light Source	Laser Phosphor		
Light Source Life	30,000 hours Normal		
Connectivity	HDMI x2 (HDMI 1.4/ HDCP 1.4)		
Power Supply Voltage	Power adaptor		
Input	100~240V		
Wall/Ceiling Mount	Yes		