



राष्ट्रीय पादप जीनोम अनुसंधान संस्थान

(जैव प्रौद्योगिकी विभाग, विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार का स्वायत्त अनुसंधान संस्थान)

NATIONAL INSTITUTE OF PLANT GENOME RESEARCH

(An Autonomous Institution of the Department of Biotechnology, Ministry of Science and Technology, Government of India)

अरुणा आसफ अली मार्ग, पो. बाक्स नं. 10531, नई दिल्ली-110067
Aruna Asaf Ali Marg, Post Box Number 10531, New Delhi-110067

संख्या: 8/2015-16/रा.पा.जी.अनु.सं./एस एण्ड पी

दिनांक: 01/10/2015

विषय / Subject: मुहरबंद कोटेशन का निमंत्रण / Invitation of Sealed Quotations

Sealed Tenders are invited on behalf of Director, NIPGR from the Original Equipment Manufacturer or their authorized dealers for the purchase of **01 no. of LED plant growth chamber** for the laboratory of our Institute, as per the following specifications:.

Technical Specifications

S. No.	Description
1	Volume: <ul style="list-style-type: none">Minimum volume required is 1100 liters or more.
2	Lighting: <ul style="list-style-type: none">Two tier of shelves lighted (each tier multi-color LED modules which can be configured to have uniform light distribution over entire shelf. LED and lamp needed are White/Red/Blue/ Far red/ UV)Intensity programmable minimum 550-650 $\mu\text{moles}/\text{m}^2/\text{s}$ of light irradiance measured @ 6" from LED Bank.Multiple-channel dimming system allows individual control of each LED color at 10-100% of light intensityProgramming and control of the lighting is done via single controller.Two Tiers, each to have minimum 550-650 μmole light
3	Controller Features: <ul style="list-style-type: none">Controls temperature, lighting, humidity (optional) and CO2 (optional)Single-board electronic solid-state design. 10 Key industrial Keypad with VFD display and LED indicatorPrograms can be configured to run in real time or elapsed time. Continuous, Diurnal and multi-step program feature. Memory of minimum 30 or more programs storage with multistep feature.Ramping and non-ramping program methods.Multiple programs can be linked creating complex sequence to simulate natural conditions.The number of output channels used for control of lighting events, convenience outlets etc., minimum 23 channels.Trouble shooting with on board diagnosticsDual experiment protection via integrated yet independent temp limit shutdown. Auto-restart when temp inside is normal.Temp low and high deviation alarm.Ambient temp monitoring,alarm (audio and visual)24 hour chamber monitoringPower failure event logging.Auto restart in case of power failure with inbuilt battery to protect memory for more than 5 years.Two Calibration offset per input channel. One for Lights ON and another for lights OFF
4	Cabinet construction: <ul style="list-style-type: none">Interior constructed of 22-gauge electro-zinc plated steelExterior constructed of 18-gauge exterior electro-zinc plated steelWelded seams and joints on outer and inner shells



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	<ul style="list-style-type: none">• Inner shell supported by non-compressing/non-thermal conducting material locking inner liner in place without a metal-to-metal bond to outer case• Chamber is completely self-contained.• Overall wall thickness is 2" (5.1 cm).• Interior and exterior to be painted with highly reflective, high temp baked white powder coating for good light distribution.
5	Growing height: <ul style="list-style-type: none">• Should have a minimum plant growth height of 52cm per tier / shelf
6	Temperature: <ul style="list-style-type: none">• 10°-44°C (±0.5°C) lights ON and 0°-44°C (±0.5°C) lights off• The temperature setting accuracy 0.1°C• In case of safety alarm, the controller should shut down the chamber and restart when the temp returns to normal. The system should restart automatically when internal temp is normal.
8	Door: One door opening 36.75" x 57.75" <ul style="list-style-type: none">• Provides full access to the chamber interior magnetic gasket provides a tight seal to door frame
9	Interior Volume and shelving area: <ul style="list-style-type: none">• Minimum 37 ft³ Space and 13.6 ft² shelving area
10	Shelving: Two tiers of white epoxy coated steel wire shelving each shelf is 27"D x 36.25"W <ul style="list-style-type: none">• Shelves slide in and out easily on stainless steel rail assemblies and can be moved up and down in ½ increment.
11	Refrigeration: <ul style="list-style-type: none">• Self-contained air-cooled condensing unit with hot gas bypass system for continuous compressor operation, extended life and close temperature control. Used for cooling and heating. NO Heater to be used.• Solenoid valves have an extended stem for quiet and long life operation
12	One power receptacle inside the chamber to connect any small equipment. Door lock with key, Delay timer to delay the start of the unit in case of power failure. Floor drain at the bottom, 230 volts operation, Service wiring diagram and spare parts list to be provided for the unit, Four level password protection for controller operation/ safety & security, Status LED in front to display mode of operation (Heat/Cool and other options), Light life time alarm, User List for Arabidopsis application. Performance certificate with customer phone no and email ID, we may visit for Demo. Indian agent to be ISO certified. Minimum Two years warranty.
13	Humidity: 60-90% (temperature 15-30°C light off)
14	Option: CO2 addition, connection to external PC for control and monitoring, Extended temp to 60C, Day light integral, suitable voltage stabilizer, PAR Light Sensor.

You are therefore requested to please send your offer in **two bid system** indicating the maximum discount offered, installation charges along with a copy of authorization certificate, issued by the Principals/OEM. The quotations must accompany a Demand Draft amounting to ₹ 29,000/- (Rupees Twenty Nine Thousand only), being the EMD in the name of Director, NIPGR, New Delhi and must be sent in a **Sealed Envelope** duly super-scribed on top of envelope as "**Quotation for LED plant growth chamber**" so as to reach to the undersigned latest by **23/10/2015 (3:00 PM)**, the same shall be opened on same day at **3.30 PM**.

धन्यवाद,

(कय एवं भण्डार अधिकारी)

Encl: Terms & Conditions (Annex – I)

नियम और शर्तें:

1. Every tender shall be accompanied with the tender cost of ₹ 500/- (Rupees Five Hundred only) in the form of Demand Draft drawn in favor of “**Director, NIPGR**” payable at New Delhi in separate sealed envelope along with the tender. In case the tender cost is not submitted, the tender will not be considered.
2. Every tender shall be accompanied with the required Earnest Money Deposit in the form of Demand Draft drawn in favour of the “**Director, NIPGR**” payable at New Delhi. Any tender not accompanied by such earnest money will be rejected straight away.
3. The rates quoted in the tender shall remain valid for a period **180** days from the date of issue of Award Letter / Letter of Acceptance of Tender. No tenderer can withdraw/or modify his tender or revoke the same within the said period. If a tenderer on his own withdraws or revokes the tender or revises or alters or modifies the tender for any item or condition within the period mentioned in the tender notice, his earnest money deposit shall stand forfeited. Notwithstanding foregoing, the Institute reserves the right to take other actions as deemed appropriate.
4. NIPGR does not bind itself to accept the lowest or any tender and reserves the right to reject any or all tenders without assigning any reason.
5. In two-bid system the tenders should be submitted containing (a) Technical Bid consisting of all technical details along with commercial terms and conditions and (b) Financial Bid indicating item wise price for the items mentioned in technical bid. The technical bid and financial bid should be sealed by the bidder in separate covers duly super scribed and both these covers must be put in a bigger cover which should also be sealed and duly super scribed. NIPGR will not pay any expense, whatsoever incurred by tenderer for the preparation and submission of tenders.
6. The notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer with the NIPGR.
7. All the correspondence on the tender shall be addressed to the Director, NIPGR, Aruna Asaf Ali Marg, New Delhi and any communication addressed to anyone else shall not in any manner to be binding upon the NIPGR, Aruna Asaf Ali Marg, New Delhi.
8. The tenderer shall submit a copy of PAN/TIN numbers allotted to them.
9. NIPGR reserves the right to change the quantities of the units while issuing the letter of award of work.
10. The successful tenderer shall be required to deposit an amount equal to 10% of the Tender value as Performance Security after adjusting the Earnest Money Deposit within 10 days from the date of issue of award letter. Performance Security may be deposited in the form of Demand Draft or Bank Guarantee from State Bank of India Or any Scheduled bank. In case of violation of any condition of Tender, the Security Deposit / BG will be forfeited / revoked.
11. The rates shall be inclusive of Transportation, loading, unloading, taxes etc., nothing extra will be paid.
12. The supplier should be responsible for any damage and site clearance and nothing extra shall be paid.

(कय एवं भण्डार अधिकारी)