



**PRASAR BHARATI
(INDIA'S PUBLIC SERVICE BROADCASTER)
DOORDARSHAN KENDRA ,GUWAHATI
RGB ROAD, GUWAHATI 781024**

No. DDK/GHY/ARCA/METP/e-Tender.6/2018

Dated: 06.12.2018

Notice Inviting e-Tender

E-tenders are invited online in www.tenderwizard.com/PB under two bid systems for the supply of LED based Studio lights from reputed manufacturers/authorized agents/ dealers as detailed below.

S.No	Tender Ref. No.	Description	Qty (No.)	Tender Fee (In Rs.)	Estimated Cost of work procurement (In Rs.)	EMD (In Rs)
1	DDK/GHY/ARCA/METP/ e-Tender.6/2018	LED Fresnel 100 W 3200K LED SPOT LIGHTS	4	Nil	21,00,000/-	42,000/-
2		LED Fresnel 100 W 5600K LED SPOT LIGHTS	12			
3		LED Profile Spot 190W	3			
4		LED Sharpy Moving Head 220W or more	5			
5		LED PAR RGBW Colour Wash Lights	4			
6		DMX Lighting Controller	2			

Consignee. 1) DDG(E) Doordarshan Kendra, Guwahati-781024
2) DDE Post production centre Guwahati -781024

NOTE:

Tender document, bid forms, General Instructions to Bidders and other details including amendments/changes can be viewed/downloaded from the website www.tenderwizard.com/PB.

The tenders will be received online up to 14.30 Hrs on 26/12/2018 and the technical bid will be opened at 15.00 Hrs. on the Same day.

C PEDDANNA
DEPUTY Director(E)
For Deputy Director General (E)

Web Site: <http://www.tenderwizard.com/PB>

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DOORDARSHAN KENDRA
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e-Tender Enquiry

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- *NOTE :
1. **Doordarshan Kendra Guwahati reserve the right to reduce the quantity to be supplied at the same rate as well as reserve the right to increase the quantity to be supplied at the same rate.**
 2. **Bidders are requested to also go through " Annexure-1" Instruction to bidders and the list of document to be scanned and upload with the tender for e-procurement system.**

Important Instruction

1. The tender will be governed by the **Instruction to bidders, General Instruction and Technical Specification(ANNEXURE-A)**.
2. The tender should take due care to submit tender on line in accordance with the requirement as specified in “**Instruction to bidders**. Bid evaluation criteria at Annexure- A Shall be basis for evaluation of tenders.
3. One Agent/Dealer/Supplier shall not represent two manufacturers or quote on their behalf in particular tender.
4. Tender document submitted by the tenders shall be serially page numbered.

2. PREPARATION OF TENDER:

ANNEXURE-1

A. GENERAL INSTRUCTIONS TO BIDDERS

- a. The scope of work or stores to be tendered are available in the complete bid documents which can be viewed/downloaded from e-tender portal of AIR <http://tenderwizard.com/PB>.
- b. Both Technical Bid and Financial Bid will be submitted concurrently duly digitally signed in the website <http://tenderwizard.com/PB>.
- c. No claim shall be entertained on account of disruptions of internet service being used by bidders. Bidders are advised to upload their bids well in advance to avoid last minute technical snags.
- d. All Corrigendum/Amendment/Corrections, if any, will be published on the website <http://tenderwizard.com/PB>.
- e. All documents/papers uploaded submitted by the bidder must be legible.
- f. It is mandatory for all the applicants to have Class-III Digital Signature Certificate (in the name of person who will sign the bid document) from any of the licensed certifying Agency.
- g. To participate in the e-tendering submission, it is mandatory for the applicants to get registered their firm/joint venture with the e-tendering portal of AIR <http://tenderwizard.com/PB> to have user ID & Password from M/s ITI Ltd.,.
- h. To participate in e-bid, bidders shall be charged e-tendering processing charges @ 0.1% of estimated contract value with minimum Cap Rs.750/- only and maximum cap-Rs.7500/- only.
- i. Bid document contains certain conditions for Manual submission of tender and are now redundant. Document shall be deemed to have been modified to that extent.
- j. Page No. shall be given on each and every paper/documents serially uploaded in the technical bid.
- k. Bidders shall ensure to quote rate of each item. If any cell is left blank and no rate is quoted by the bidders, the rate of such item shall be treated as “0” (Zero). The Earnest Money shall be in the form of FDR/Bank draft/Bank Guarantee from an Indian scheduled Commercial Bank in favour of **The Additional Director General(E), (NEZ), AIR & TV, RGB Road, Guwahati-781024**.
- l. However exemption we will be given to the firms registered with NSIC. EMD deposit’ shall be placed in a single sealed envelope superscribed with tender reference no and date of opening so as to reach **The Additional Director General(E), (NEZ), AIR & TV , RGB Road, Guwahati-781024**. Before scheduled time on prescribed tender opening date. EMD received late shall be summarily rejected. Hard copy of any other tender document shall not be accepted.
- m. **E-Tender support Help Desk :- 9706501633,9864779970,80984699169,080-40482000,011-49424365**

B) LIST OF DOCUMENTS (to be scanned and uploaded with tender) to be submitted in the technical bid

1) The tender shall consist of two bids namely:

TECHNICAL BID: Technical bid should contain the confirmation to the enclosed technical specifications. **During the Technical evaluation, the tenderer needs to demonstrate the performance of the equipment offered, if required. In the technical bid, the list of document as mentioned below should be upload. The technical bid should not contain any commercial information.**

1. **Copy of EMD/ Copy of NSIC Registration certificate in case of exemption of EMD**
2. **Copy of Demand Draft/Pay Order of any Scheduled Bank or fee receipt towards EMD.**
3. **Copy of GST / PAN card**
4. **Technical compliance statement to the specifications of the tender.**
5. **Original Equipment Manufacturer (OEM) Authorization for Equipment quoted.**
6. **Technical leaflets/manuals for the make & model of the equipment offered**
7. **Past Performance along with the user certificate in respect of Supply/SITC/SETC of the Equipment quoted**
8. **Full details of after sales service capability with the locations of service centres across the country**
9. **The bids not complied with the above shall be summarily rejected.**

COMMERCIAL BID: The commercial bid should contain the price bid and acceptance of the commercial terms and conditions of this tender document in the prescribed format as in **ANNEXURE-A**. The price should be quoted for free delivery of materials at respective destinations.

Both Technical Bid and Financial Bid will be submitted concurrently duly digitally signed in the website <http://tenderwizard.com/PB>.

MANUAL/TELEFAX/E-MAIL offers, received directly by this organization, will not be considered.

In case tender opening date falls on a holiday, the bids will be received and opened at the same specified time on next working day. Bids received late or submitted after the scheduled specified time on scheduled date will not be entertained and will be returned back unopened.

The purchaser may, at his discretion extend the deadline for the submission of the bids by amending the bid document, in which case all rights and obligations of the purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

Tenderer should quote for all the required items. Partial tenders will be rejected.

2. The quotation should specifically mention **Make & Type of the items**, delivery date, terms and condition of supply. The prices given should be firm and as under.
 - (a) The prices quoted shall remain fixed during the entire period of supply/contract and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation is likely to be treated as non responsive and rejected.
 - (b) The 'Unit' Price should be for the Unit as indicated in the tender enquiry.
 - (c) Prices quoted should be for F.O.R. Station of destination in India and Inclusive of charges as packing customs, etc., wherever applicable.
 - (d) **The quotation should specifically mention rates for Supply & Taxes separately.**

(e) **OEM authorization should be enclosed in the case of quotation from authorized dealer.**

In case of Quotation of F.O.R Station of dispatch basis, the purchaser will not pay separately transit insurance and the supplier will be responsible until the stores arrive in good condition at the destination. Tender/quotation in which transit insurance has been specified as an additional item of expenditure is liable to be ignored.

- 3. EMD:** Earnest Money amounting to **Rs. 42,000/-** [Rupees forty two Thousands only] shall be in the form of FDR/Bank draft/Bank Guarantee from an Indian scheduled commercial Bank in favour of **The Additional Director General(E) (NEZ), AIR & TV RGB Road, Guwahati-781024**.and submitted to this office in a separate cover superscribed with Name of the tender and Due date however, exemption will be given to the firms registered with NSIC.EMD in separate sealed cover shall reach this office by speed post/by courier before due date of opening.
- i. If any tenderer withdraws his tender before the expiry of the validity period, or before the issue of letter of acceptance, whichever is earlier, or makes any modification in terms and conditions of the tender which are not acceptable to the department, then the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit the earnest money absolutely. This provision would naturally apply only to the lowest tenderer once the earnest money of all the tenderers except those of the lowest is refunded as per provisions.
 - ii. In case the contractor fails to supply items / commence the work specified in the tender documents on the 15th day or such time period as mentioned in letter of award , after the date on which the Purchaser issues written orders to commence the work, or from the date of handing over of the site, whichever is later, the Government shall, without prejudice to any other right or remedy, be at liberty to forfeit whole of earnest money absolutely.
 - iii. If only a part of the items / work as shown in the tender is awarded, and the contractor does not commence the supply / work, the amount of the earnest money to be forfeited to the Government should be worked out with reference to the estimated cost of the work so awarded.
 - iv. In case of forfeiture of earnest money as prescribed in **i to iii** above, the tenderer shall not be allowed to participate in the retendering process of the work.

4. SECURITY DEPOSIT: The successful Tenderer shall furnish the Security Deposit within 2 weeks after placement of order at the rate of **5% of the Order Value, failing which the EMD shall be held as part of the Security Deposit.** The security deposit shall be furnished in the form of Demand Draft / Bank Guarantee drawn in favour of **The Additional Director General(E) (NEZ) ,AIR & TV RGB Road, Guwahati-781024**. The Security Deposit will be returned in full on completion of successful Guarantee/Warranty Period.

For release of Security Deposit / Performance Security, the firm will submit his claim along with a certificate from the consignee that equipment supplied / SITC executed against this order has performed satisfactorily during its Warranty / guarantee period and department have not suffered any loss / inconvenience on this account.

5. TAXES:

- a. Payment of Entry Tax / Octroi Duty and Toll Tax (on ultimate products). As the material, which is to be transported to the consignee, belongs to the Government of India / Prasar Bharati and therefore is exempted from Entry Tax / Octroi Duty / Toll Tax. However, if the State Governments / Statutory Local Bodies are bound to levy such taxes, the taxes will be paid by supplier / contractor. Supplier / Contractor may raise its claim, for reimbursement of such duties / taxes paid, with Organization, along with original receipt of the payment.
- b. The prevailing rate of IGST/CGST/SGST as applicable should be clearly mentioned in the tender separately. The following certificates are to be submitted by the supplier along with the bills. Certified that we are registered as dealers in the State under registration No. for the purpose of GST.

*** Please note that this Office will not issue any Form such as 'C', 'D' etc.**

6. Printed terms and conditions of tendering firms will not be considered as forming parts of their tender.
7. **GUARANTEE / WARRANTY PERIOD:** The supply shall be guaranteed against any Manufacturing/ Execution defects for a period of minimum **3 Years** from the date of completion of the supply. Any parts failing during the Guarantee period shall be repaired / replaced free of charge by the supplier at the Sites.
8. **DELIVERY OF STORES:** The supply shall be completed within **one month** from the date of placement of order.
9. **TERMS OF PAYMENT: -**
100 % Payment on receipt of stores in good working condition.
10. The tender bids will be received online up to **14.30 Hrs on 26/12/2018**
The Technical bid will be opened in this office at **15.00 Hrs. on the same day.**
The commercial bid opening will be notified after recommendation of technical committee.
11. The quotations submitted shall remain open for acceptance for a period of **90 (Ninety) days** from the date of opening of the Tender. If any Tenderer/ Suppliers withdraws his Tender/Quotation before the said period or makes any modifications in the Terms & Conditions on the Tender/Quotation which are not acceptable to the Department, then the Government shall, without prejudice to any other right or remedy, be at the liberty to forfeit the Earnest Money as aforesaid.
12. Both your **PAN - Permanent Income Tax Account Number** and Income Tax Circle should be clearly indicated in your quotation.
13. **Bill Submission:-**
 - i. Following details shall be clearly mentioned in the bills so that payment shall be made by **NEFT**
 - ii. PAN NO, TIN NO, Service Tax number should also be clearly indicated in the bill.
 - iii. Payment shall not be made without the above details.
14. **In case of supply of any Specific or Manufacturer item, the Manufacturer's Test Certificate/preferably from MSME, should be enclosed** with the supply.
15. **RIGHT OF ACCEPTANCE:** The undersigned reserves the right to reject the lowest tender or all the tenders without assigning any reasons whatsoever. Further, the undersigned reserves himself the right to increase or decrease up to 50% of the quantity of goods and services specified in the schedule of the requirement without any change in the unit price of the order quantities or other term conditions at the time of award of contract. All Quotations/Tenders in which any of the prescribed conditions are not fulfilled or are incomplete in any respect are liable to be rejected. The competent authority on behalf of President of India reserve himself the right of accepting the whole or any part of the Tender shall be bound to perform the same at the rate quoted.
16. Canvassing whether directly or indirectly, in connection with Tender/quotation is strictly prohibited and the Tender/quotation submitted by the Contractors / suppliers who resort to canvassing will be liable to rejection.
17. The undersigned also reserves the right to place Repeat Order up to 50% of the quantity of goods and services contain in the running tender / contract within a period of 6 months from the date of order/ agreement at the same rate.
18. **LANGUAGE / UNITS:** All information supplied by the Tenderer & all markings, notes, designation on the drawings & associated write-ups shall be in "**English language**" only. All dimensions, units on drawings, all references to weights, measures & quantities shall be in MKS.
19. In case this is second enquiry, your Quotation in response to the first enquiry should be presumed to be valid up to 120 days from the last date mentioned in para 12 above unless we hear from you.

- 20. AFTER SALES SERVICE:-** The Tenderer should give full details of after sales service Capability. The locations of service centers across the country shall be indicated. If there is no service centers at/ near the location of the site the tender is likely to be rejected.
- 21. TECHNICAL SPECIFICATION AND GENERAL TERMS AND CONDITIONS:-** For technical specification, see the specification document. **The tenderer should submit necessary pamphlets description of items being as given in ANNEXURE-A- along with technical bid and also the firms to which similar items were supplied in the near past and completion report.**
- 22. CONDITIONS OF CONTRACT:**
- a. DGS & D-68 (Revised) and DGS & D-71 as amended up to date. However, such of these conditions stipulated on this tender shall supersede corresponding conditions in DGS&D-71.
 - b. The contractor shall sign a contract agreement form in triplicate in the prescribed proforma and submit the same along with Security Deposit within 2 weeks. The complete form with the purchaser's signature shall be sent back to the contractor. No supplies will be made and no work shall start unless the agreement is signed by the contractor and the purchaser.
- 23. FAILURE AND TERMINATION CLAUSE**
- Time and date of delivery shall be essence of the contract. If the Contractor / Supplier fails to deliver the stores / execute SITC / SETC, or any installment thereof within the period fixed for such delivery in the schedule or at any time repudiates the contract before the expiry of such periods, the purchaser may without prejudice to any other right or remedy, available to him to recover demurrages for breach of the contract:-
- (a) Recover from the Supplier/Contractor as agreed, liquidated demurrages including Administrative expenses and not by way of penalty, a sum equivalent to 0.5% per week up to maximum limit of 10% of the contract value for such delay or part thereof (this is an agreed, genuine pre-estimate of demurrages duly agreed by the parties) which the supplier/contractor has failed to deliver thereof is accepted after expiry of the aforesaid period, provided that the total demurrages so claimed shall not exceed 10% of the contract price of the stores / SITC / SETC. After full period of extension, termination of the contract will be considered by the Organization.
 - (b) Purchase or authorize the purchase elsewhere on the account and at the risk of the contractor/supplier, of the stores not so delivered / SITC / SETC not carried out or other of a similar description (where stores exactly complying with the particulars are not in the opinion of the purchaser, which shall be final, readily procurable) by serving prior notice to the contractor/supplier without cancelling the contract in respect of the installment not yet due for delivery or,
 - (c) Cancel the contract or a portion thereof by serving prior notice to the Contractor/Supplier and if so desired purchase or authorize the purchase of the stores not so delivered / SITC / SETC not carried out, or others of a similar description (where stores not delivered / SITC / SETC not carried out, exactly complying with particulars are not in the opinion of the purchaser, which shall be final readily procurable) at the risk and cost of the Contractor/Supplier. If the Contractor/Supplier had defaulted in the performance of the original contract, the purchaser shall have the right to ignore his tender for risk purchase even though the lowest, where the contract is terminated at the risk and cost of the firm under the provisions of this clause, it shall be in the discretion of the purchaser to exercise his discretion to collect or not, the Security deposit from the firm on whom the contract is placed, at the risk and expense of the defaulted firm.
 - (d) Where action is taken under sub-clause (b) or sub-clause (c) above, the contractor shall be liable for any loss which the purchaser may sustain on that account, provided the purchase or if there is an agreement, to purchase, such agreement is made in case of failure to deliver the Stores/Services, within 6 months from the date of such failure and in case of repudiation of contract the Contractor/Supplier shall not be entitled to any gain on such the entire discretion of the purchaser to serve a notice of such purchase on the Contractor/Supplier.
 - (e) It may further be noted that clause (a) above provides for recovery of liquidated demurrages on the cost of contract price of delayed supplies (whole unit) at the rate of 0.5% per week up to maximum limit of 10% of the contract value for such delay or part thereof. Liquidated demurrages for delay in supplies thus accrued will be recovered by the paying authority on instruction as specified in the supply order, from the bill for payment of the cost of materials / works submitted by the supplier / contractor in accordance with terms of supply order on instruction from Purchaser regarding liquidated demurrages amount.

- (f) Notwithstanding anything stated above, equipment and materials will be deemed to have been delivered / SITC / SETC will be deemed to have been carried out only when all its components, parts are also delivered. If certain components of stores are not delivered in time / SITC / SETC not carried out in time, the stores / SITC / SETC will be considered as delayed until such time all the missing parts are also delivered.

24. ARBITRATION OF CONTRACTUAL DISPUTES:

If a dispute arises out of or in connection with the contract, or in respect of any defined legal relationship associated therewith or derived there from, the parties agree to submit that dispute to arbitration under ICADR Arbitration Rules, 1996. The Authority to appoint the arbitrator(s) shall be the International Centre for Alternative dispute resolution.

The International centre for Alternative Dispute Resolution will provide administrative services in accordance with the ICADR Arbitration Rules, 1996.

- a) The number of arbitrator(s) shall be one who has legal as well as Technical Background.
- b) The language of the arbitration proceedings shall be English.
- c) The place of arbitration proceedings shall be **Guwahati only**.

25. FORCE MAJEURE:

a. If any time during the continuance of the contract the performance in whole or in part by the contractor shall be prevented or delayed by reason of any war, hostility acts of the public enemy. Civil commotion, sabotage, fires, floods, explosions, epidemics, Quarantine restrictions, strikes, lock-outs or acts of God (therein after restrictions refer to as events and provided notice of happenings of any such eventuality is given by the contractor within 21 days from the date of occurrence thereof, the purchaser shall by reason of such event, neither be entitled to cancel this order nor shall have any claim for damages against the contractor in respect of such non-performance or delay in performance and delivery shall be resumed as soon as practicable after such events have come to an end or ceased to exist.

b. Provided further that if the performance in whole or part or any obligation under this order is prevented or delayed by reasons of any such event for a period exceeding 180 days, the purchaser and the contractor shall meet to find a neutral agreement to any effect resulting the reform or the purchaser may at his option cancel order provided also if the order is cancelled under this clause, the purchaser shall be at liberty to take over from the contractor at order prices all unused, un-damaged and acceptable material bought out components and stores in course of manufacture in the possession of the supplier at the time of such cancellation or such portion thereof as the purchaser may deem fit accepting such material, bought out components and stores as the supplier may with the concurrence of the purchaser elect to retain.

26. CANCELLATION:

The purchaser reserves the right to cancel the order in the event of non-performance / delay in execution of the work or unsatisfactory performance by the contractor and recover payment already made if any, along with losses/ damages incurred.

27. GENERAL:- All the pages of the tender document should be duly signed, stamped and serially numbered on submission, failing which the tender may not be considered as qualified tender.

(C.Peddanna)
Deputy Director(Engineering)
For DDG (E)
E-mail:ddgeng.ghy@gmail.com

ANNEXURE-A

Supply of LED Studio lights for Doordarshan Kendra, Guwahati

SCOPE:

- a. The specification aims at the procurement of **LED Studio Lights** for studios of Doordarshan Kendra, **Guwahati**.
- b. The scope of the supply of LED studio lights envisaged in this tender should consist of the following items:
 1. LED Fresnel 100 W(3200K) LED SPOT LIGHTS : 04 Nos.
 2. LED Fresnel 100 W (5600K) LED SPOT LIGHTS : 12Nos.
 3. LED Profile Spot 190W : 03 Nos
 4. LED Sharpy Moving Head min 220W : 05 Nos
 5. LED PAR RGBW Color Wash Lights : 04 Nos.
 6. DMX 512 Lighting Controller 2048 Channel : 02 Nos.
- c. The offered system should be of **reputed make**, meeting the specification and field proven. The OEM/bidder should enclose the client list and the contact details where similar products have been supplied. **The bidder should essentially enclose the authorization certificate issued by the OEM for the offered products.** Local service support must be available for optimum upkeep of the system. Proof of the local support should be enclosed.

GENERAL FEATURES OF LED LIGHTS:

- a) The unit should meet the professional standards that are normally followed in Television Production Studios.
- b) The LED studio lights offered should be made of sturdy die cast aluminium body ergonomically designed with sufficient vent holes for cooling the light fitting.
- c) The light source should be highly energy efficient and should use high performance LEDs of known reputed brands with near constant spectrums over the maximum dimming range to give unchanged color temperature.
- d) The LED lights must deliver light with high CRI (Colour Rendition Index) for improved color perception. The acceptable CRI of LED lights should be 90 or above
- e) The luminous efficiency of LEDs should be of 150 Lumens/watt due to new developments in the manufacturing of LEDs.
- f) The studio lights should use LEDs whose origin of light is spread over a larger area to achieve better light distribution and low glare.
- g) The LEDs should have a good quality diffuser lens which reduces light wastage and spreads it in a highly controlled manner.
- h) The offered LED light should have long lamp life. To ensure long life the LED panel must be mounted on heat sink with sufficient fins for efficient cooling. Fan mounted cooling system is not acceptable
- i) The offered LED lights should be dimmable with and without DMX control.
- j) All LED lamp should be DMX controllable and hence required DMX IN/OUT connectors and facility for setting the address should be available.
- k) The fitting should be supplied with a minimum of three meters of 3-core power supply cable of suitable capacity fitted with three pin Industrial plug of 5-Amp rating suitable for Indian environment.
- l) All LED studio lamps should essentially be supplied with necessary C-clamps to hang on the Lighting bars and also with safety chains.

ESSENTIAL FEATURES & TECHNICAL SPECIFICATIONS:

3.1 SPECIFICATION FOR LED 100 W FRESNEL SPOTS

- DMX512 control : 2channels
- Focus : focus through DMX control
- DMX Connectors : 3Pin
- Dimmer : 0 ~ 100% (DMX)
- Beam angle : 12 ° ~ 40 °
- Color Temperature : either 3200+200K or 5600K+200K
- Pole operated : facility to Pan & Tilt through pole must be present
- Rotating Barndoor and hanger
- Thermo-optical cooling technology, no noise
- LED : 100 watts LAMP
- Power supply : AC90V ~ the 250V50Hz
- Power consumption : less than 160W
- Body temperature : <60 ° C
- Working life : 50,000 hours
- CRI : Ra= 90 or more
- Luminous efficiency : 24.3Lm/W(WW)/34.64Lm/W(CW)

3.2 SPECIFICATION FOR LED Profile SPOTS

- DMX Channels : 1, 2, or 3
- DMX Connectors : 3 pin
- Light Source : 19 (Warm White) 10W (2.8A) LEDs 50,000hrs
- Efficacy : 30 LPW (26° Lens)
- Strobe Rate : 0 - 20Hz
- Beam Angle : 17.3° (W/ 26° Lens)
- Field Angle : 26° (W/ 26° Lens)
- Illuminance : 3,446 lux @ 5m (W/ 26° Lens)
- Color Temperature : 3,100K
- IP Rating : IP20
- Operating Temperature : 22° - 45°C
- Min Cable Length : 5ft (1.5m)
- 230VInput Voltage : Auto-ranging 100 - 240VAC 50.

3.3 SPECIFICATION FOR Sharpy Moving Heads

- **Product Name** : *Sharpy Moving Head*
- **Light source** : Min 220W or more
- **Power** : App 300W Approx
- **Lifespan** : Should be more than 2000 Hours lamp life span
- **ZOOM range** : 2.5°-8° beam model
- **Color Wheel** : 1 color wheel, 11) colors + white, Variable direction rainbow effect with speed adjustable
- **Gobo Wheel** : 1 rotating gobo wheel , 12 rotating gobos + white
1 static gobo wheel , 10 fixed gobo + white
- **Prism Rotation** : speed adjustable and variable direction rotation

Pan/Tilt	540°Pan scanning, 270°Tilt scanning Pan/Tilt Scan position memory function, automatic reset after unexpected movement 8/16 -bit precision smooth Pan/Tilt rotation 2pcs 1/4 fastening Omega Clamps 2.2 inch color LCD display with English menu,
Dimming	0-100% electronic dimmer
DMX Connectors	Connectors : 3Pin 3-Pin XLR connector IN/OUT 5-Pin XLR connector IN/OUT
<ul style="list-style-type: none"> ▪ Control Signal 	DMX 512, Master-slave, Sound, Self-propelled
<ul style="list-style-type: none"> ▪ Control Channels 	16/20CH

3.4 Features of LED PAR RGBW Color Wash lights (non motorized)

- a) The offered LED PAR Color RGBW wash light should use equal number of high brightness Red, Green, Blue & White LEDs (at least 12 numbers each) to generate more vibrant colors and precise color temperature.
- b) The color wash LED light should be flicker free so that it is best suited for the Television production.
- c) It should be possible to use built-in automated programs and recall custom programs through DMX channels.
- d) The light fixtures should support using of up to 11 DMX channels for various operations like controlling, dimming, ID addressing, Strobbing, macro, auto/custom, dimmer speed controlling, auto speed controlling etc.,
- e) The LED PAR color wash light should be fitted with adjustable barn doors to control light throw. The Color Gel frame should also be a part of the fitting to hold Gel papers.
- f) The RGB color mixing should be feasible both with and without DMX control.
- g) The LED light should have a display panel with lock feature to activate or disable the control panel lock, which keeps un-authorized personnel from changing the fixture's settings.
- h) The light should facilitate Master/Slave mode operation which allows a group of LED fixtures (the slaves) to execute simultaneously the same program, whether auto or custom that another fixture (the master) is executing.
- i) The light fitting should be provided with double bracket yoke mounting assembly that facilitates the fixture to be mounted on lighting bars and doubles for floor stand. The fitting should allow the user to pan and tilt the fitting to the required angle and orientation.
- j) The light fixture should preferably have additional AC power output socket to connect at least another of 5 or more similar fixtures in Daisy chain.

3.4 Technical Specification of LED PAR RGBW Colour Wash lights:

1.	Lamp Body	: Powder coated, die-cast Aluminium
2.	Optical systems	: 30°
3.	Beam angle	: 5°to 30° or better
4.	Field angle	: 10° to 45° or better
5.	Lux	: Equal to or better than 8000 @ 2m and min. beam angle
6.	Light Source	: Minimum 14LEDs x 15W each High brightness LEDs
7.	Color Temperature	: 3200°K to 10000°K
8.	Life of LED	: Minimum 50,000hrs
9.	Address setting by	: DIP switches/Menu(Soft button with LCD)
10.	DMX data IN/OUT	: XLR 3-pin Male/XLR 3-pin female
11.	Power and current	: 230V, 50Hz: 180W, 0.8A operating, 0.8A inrush approx
12.	Power Factor	: 0.99 or better
13.	AC power	: Auto switching 100V-240V, 50Hz
14.	Power Linking	: 5 units minimum & 10 units maximum @ 230V
15.	Cooling	: Natural Convection, heat sink

3.5 DMX-512 Lighting Controllers

- a) The bidder should offer ergonomically designed intelligent desk mounted DMX Lighting controller for programming and controlling the DMX controllable light fittings.
- b) It should be possible to control a minimum of 12 intelligent lights of up to 32 channels per light.
- c) The controller should facilitate in storing at least 100 programmable scenes.
- d) Chase banks composed of the saved scenes can be played in any order as decided by the Programmer.
- e) The Programs can be triggered by music, midi, automatically or manually.
- f) The controller should be user friendly in Channel assignments so that re-assigning & re-programming of channels can be done in a facile manner.
- g) The controller's surface should house reversible universal channel sliders and various buttons for operations like scene selection, chase selection, fixture selection, strobe, fog activation. Dedicator sliders for adjusting Speed time and Fade time should be available.
- h) The controller should have an LCD display indicator for easier navigation of controls and menu functions.
- i) The controller should be MIDI compatible and allow an external MIDI controller for triggering of banks, scenes, chases, and blackout.

Technical Specification of DMX 512 Light controller:

S.No	Description	Technical requirement
1	Protocol	DMX 512
2	Min No of Channels	2048
3	Output	Optically isolated 4 Outputs
4	Monitor/Operation	Should have LCD Display and VGA output
5	Memory	Capable of storing multiple scene in local and USB Memory stick
6	Accessories	DMX Cable with DMX Connector <ul style="list-style-type: none"> • 35mtrs- 10Nos • 10 mtrs-24Nos • 5 mtrs- 24 Nos
7	Power supply	230V & 50 Hz