



# UNIVERSITY OF KERALA

DEPARTMENT OF PHYSICS

KARYAVATTOM, THIRUVANANTHAPURAM, INDIA – 695581.

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(Established as University of Travancore by the Travancore University Act in 1937 and reconstituted as University of Kerala by the Kerala University Act of 1957 and presently governed by the Kerala University Act 1974 passed by Kerala State Legislative Assembly)

(NAAC Reaccredited with 'A++' Grade)

KU/PHY/117/23-24

04.01.2023

## QUOTATION NOTICE

Sealed competitive quotations are invited for the supply, installation, testing and commissioning of a **2 Ton Air Conditioner** and accessories in the Modular Thin film laboratory of Department of Physics, University of Kerala, Kariavattom Campus. The specifications are given as below:

Sl. No	Item Description	Qty	Unit
1	Supply of 5KVA Voltage stabiliser for split AC unit with voltage range of 140-280 V stabiliser with Low and High Voltage Cut Off, Intelligent Time Delay, Thermal Overload Protection, Micro-controlled Circuitry, Digital Display, Fire-retardant ABS Plastic Body, Wall Mountable Cabinet Design with 3 months replacement warranty and 3 years on-site warranty. (V Gaurd/Crompton/Microtek)	1	each
2	Supply and Installation of powder coated/stove enamelled metallic mount for wall mounting of outdoor unit of air conditioner with required number of anchor bolts, vibration isolators and non-slip foundation bolts of suitable size of ODU	1	each
3	Supply, installation, testing and commissioning of fully charged (top-up as per site requirement) – 2.0 TR BEE Five Star Rated, High Wall Split Air conditioning unit fitted with variable Frequency Drive Inverter compressor (Dual Inverter or equivalent) operating on either R32/R290 refrigerants, complete with indoor and outdoor units comprising of blowers, motors, bluefin/gold fin copper cooling tube coil and bluefin/gold fin copper condenser tube coil. The machine should be high wall mounter capable of Dust filtering, cooling, dehumidifying, air circulating. The package shall have microprocessor control with cordless remote, refrigerant, electric cable of ISI mark interconnected control cable (2.5sq.mm or suitable size) from indoor to outdoor units, copper pipe and thermal insulation up to 3.5 M with 13mm nitrile rubber insulation, with UV proofing, heavy duty PVC drain pipe, and unit should be suitable for long copper pipe length more than 20 Mtr (distance between outdoor & unit) as required with two year on-site warranty and free service in every three months during warranty period, minimum 5 year compressor warranty, PCB replacement guarantee for first two years and warranty for minimum 5 years. Make: - General/Hitachi/Daikin/ Mitsuubi/Voltas/Carrier/Panasonic/Blue Star	1	each
4	Supply and installation Soft drawn bright annealed copper pipes of 0.8mm thickness (suction and discharge) covered with sleeve type insulation of OEM approved make insulation of minimum 10 mm thick completely wrapped with monsoon tape shall be fixed on walls with Aluminium straps with necessary brazing, pressure testing suitable for 1.5 TR machines	3	metre

5	50.18.7.2.1 Providing and fixing PVC pipes, fittings including fixing the pipe with claps at 1.00 metre spacing. This includes jointing of pipes & fittings with one step PVC solvent cement and testing of joints complete as per direction of Engineer-in-Charge 20 mm dia 12Kgf/cm <sup>2</sup> - Internal work - Exposed on wall	4	metre
6	90.10.3.23 Supply and Fixing the following modular switches & accessories in the existing front plates and giving necessary connections as required (RoHS compliant )16A 3 pin plug top	6	each

## TERMS & CONDITIONS

### Conditions

1. Prices should be quoted item wise with unit price and total price
2. Total amount including all charges and taxes should be quoted. Nothing extra will be paid in addition to the quoted cost.
3. GST % details should be mentioned (GST No of University: 32AAAJU0328FIZJ)
4. Validity of the quote: Quote submitted shall remain valid for a period of 90 days from the date of opening of the quote. Validity beyond three months from the date of opening of the quote shall be on mutual consent.
5. Delivery and Installation: Proposed delivery schedule shall be mentioned clearly. Delivery and installation shall be made in the Modular Thin film laboratory of Department of Physics, University of Kerala, Kariavattom Campus, Kariavattom-695581 without any extra cost. Complete installation, testing and demonstration of the system and day-to-day maintenance are to be provided at site.
6. Complaints with the items supplied should be rectified/replaced to the satisfactions of the university by the suppliers at their own cost.
7. Payment will be made only after the compliance certificate from the due authority at our own site.
8. The undersigned reserves the right to reject/accept any quotation without assigning any reason.

The sealed quotations are to be addressed to The Head of the Department, Department of Physics, University of Kerala, Kariavattom Campus. The sealed quotations are to be submitted before undersigned not later than 3.P.M on or before 30.07. 2023.The undersigned reserve the rights to reject any or all the quotations without any reason whatsoever.

Palce: Kariavattom  
12.07.2023

**Professor & Head**

