

FORM OF SHORT TENDER NOTICE

Government Engineering College Thrissur

Sealed tenders are invited for **Purchase of Micro wave work benches of Electronics****Engineering Department****Approximate cost Rs 1,90,000/-**

Specification separately attached

The envelopes containing the tender should bear the superscription "Tender No. **D1/52/23-24 due on 27/12/2023 2 p m** and should be addressed to the Principal, Government. Engineering. College, Thrissur, Kerala..

Last date for receipt of tenders will be **27/12/2023 2.00 pm** Late tenders will not be accepted. The tenders will be opened at Government Engineering College Thrissur on **28/12/2023 2.00 PM** in the presence of such of the tenderers or their authorized representatives who may be present at that time. Intending tenderers may, on application to the Principal, Govt. Engineering. College, Thrissur, obtain the requisite tender forms on which tenders should be submitted. Application for the tender form should be accompanied by a cash remittance of **Rs.472/- (400+18%GST) + postal charge** which is the price fixed for a form/set of forms and which is not refundable under any circumstances. The tender forms are not transferable. Sale of tender forms will be closed at **2.00 pm on 27/12/2023** Cheques, postage stamps, etc., will not be accepted towards the cost of forms, nor will the forms be sent per V.P.P.

Tenders should be accompanied by an EMD of 1%, i.e., Rs. 1,900/-, of the amount by DD drawn in favour of the Principal, Government Engineering College, Thrissur, with an agreement in Kerala stamp paper worth s. 220/-. Details can be obtained from the Govt. Engineering College Office during normal business hours.

Place:Thrissur

Dr Satish K P

Principal

Copy to

1. Notice Board
2. Sooryan J S Electronics Engineering Department

SPECIFICATION

SL NO	ITEM	QUANTITY
1	Work bench with Klystron oscillator	2
2	Workbench with Gunn oscillator	2

1. Microwave Work Bench (type 1)

List of components

- 1) Klystron Power Supply
- 2) Klystron mount Wire
- 3) Klystron Tube
- 4) Variable Attenuator
- 5) Slotted section probe Carriage
- 6) Tuneable Probe
- 7) Detector Monut diode
- 8) BNC to BNC connector
- 9) VSWR Meter
- 10) Direct reading frequency meter

2. Microwave Work bench (type 2)

List of components

- 1) Gunn power supply
- 2) Gunn oscillator
- 3) Pin modular
- 4) Detector diode
- 5) BNC to BNC

Detailed Technical Specification

Klystron Power Supply

Voltage:200-450 VDC, Variable

Current : 50 mA

Repeller Supply:-10 V to – 270 V DC Variable

Filament Supply : 6.3 VDC

Over-Load Trip Current: 50 mA

Modulation : AM (Square) FM (Saw - tooth)

Frequency Range: 500-2000 Hz, 50-150 Hz

Amplitude:0-110 Vpp, 0-60 Vpp

External :Through External Modulating Signal

Digital display for: Beamvoltage, BeamCurrent, Repeller voltage

Modulation Selector : CW/AM/FM/EXT

Meter Selector: Beam Voltage(V)/Current(I)/(Repeller) Rep.

Gunn Power Supply

Display :16 x 2 Characters

LCD: Show-volt, Current, Modulation Frequency

Voltage Range :0 to 10V

Current :750mAmax.

Stability:0.1% for ± 10% mains variation

Ripple :1.0mV typical

Modulating Frequency: 800 to 1200Hz

ModulatingVoltage:0-10 Vppvariable

Modulation Modes: Continuous Wave, Internal Modulation (Square Wave)

Connector :BNC for Gunn Bias, BNC for Pin Bias

Mains Supply :220VAC ±10%, 50Hz

Microwave Power Meter

Frequency range: 8.2 to 12.4GHz

Power range : -10dBm to +20 dBm

Power measurement: dBm, mW, W, dBW, Vrms, Vpeak with bar graph

Display : 20x4 LCD

Power requirement : 230V +/- 10% AC

Power sensor: Inbuilt in main unit of Microwave Power Meter.

RF input connector : SMA Connector

VSWR Meter

Display : LCD (16 X 2)

Sensitivity: 0.1 mV for 200 ohm input impedance

Noise Level : Less than 0.02V

Atten. Range : 0 - 60dB in 10dB steps

Input: Un-biased low and high impedance crystal biased (200ohm and 200Kohm)

Display : SWR Scale, dB Scale, Modulation Frequency, Power Bar Graph

Modes : Normal, Audio, PC-Interface

Gain Control: Adjust the reference level, variable range 0-10dB (Approximately) Input Connector : BNC (F)

Input Frequency : 1 KHz \pm 10

Power: 230 Volts AC \pm 10%, 50Hz

Approval Valid

Digitally Approved By

Dr. Satish K P

Date: 17.11.2023

Reason: Approved

The document is digitally approved. Hence signature is not needed.

