

Department of Physics

University of Rajasthan, Jaipur

No *N.O. PHY/2020/653-A*

Date: 04/02/2020

TENDER NOTICE

Sealed quotations with terms and conditions are invited for the purchase of different items mentioned below in the Department of Physics, University of Rajasthan, JAIPUR-302004. Interested Firms (suppliers / make) are requested to give in additional full detail of the specifications, delivery and availability of the quoted on the forwarding basis etc.

1. 30MHz DUAL TRACE OSCILLOSCOPE WITH COMPONENT TESTER

Features

- DC - 30MHz Bandwidth
- 1mV/div Sensitivity on Both Channels
- CH1, CH2 (Independent Channels), CH1 & CH2 (Alternate / CHOP), CH2 INVT, ADD and SUBTRACT
- X-Y Operation
- 40ns/div to 0.2s/div Time Base
- 140mm Rectangular CRT with Internal Graticule
- Triggering to 40MHz
- Z Modulation (TTL Level)
- 8 x 10 cm. Display
- TV Triggering Frame (V) & Line (H)
- MAINS Trigger
- Variable Hold Off
- Built-in Component Tester / Comparator

Technical Specifications

VERTICAL DEFLECTION

Deflection Coefficient (CH1 & CH2)	1mV/div to 20V/div. 5mV/div to 20V/div in 12 calibrated steps in 1-2-5 sequence. x5 Magnification increases the sensitivity to 1mV/div & 2mV/div. (LED indicated).
Accuracy	±3%.
Bandwidth	DC - 30MHz (-3dB), dc coupled. 10Hz -30MHz (-3dB), ac coupled. 20MHz (-3dB) in x5 MAG.
Rise-Time	11.6 ns or less, 17.5ns in x5 MAG.
Display Modes	CH1, CH2, CH1 & CH2 Alternate or Chop mode, Algebraic addition CH1+CH2, Algebraic subtraction CH1 - CH2, CH2 Invert & X-Y.
Input Impedance	1 M ohms & 25 pF (approx).
Maximum Input Voltage	400 Volts (dc + peak ac).
Internal Trigger Signal	CH1 or CH2 signal.
TIME BASE	
Sweep Speed	18 calibrated steps. 0.5 μs/div to 0.2 s/div in 1, 2 & 5 sequence.
Sweep Magnifier	x5 Magnification extends the sweep speed to 100 ns/div. x5 Magnification indication with LED.
Accuracy	±3%.
Variable	Uncalibrated continuously variable control between steps, extends fastest sweep speed to 40 ns/div (approx). (Uncal LED indication).
Hold-off Time	4:1 variable control.
TRIGGER SYSTEM	
Triggering Mode	Automatic or Normal with Level Control.
Source	CH1 / CH2 / MAINS / EXT.
Slope	Positive or Negative.
Coupling	ac / dc / HF reject or TV Frame / TV Line.

Trigger Sensitivity	<table border="1"> <thead> <tr> <th>Mode</th> <th>Freq - Range</th> <th>INT</th> <th>EXT</th> </tr> </thead> <tbody> <tr> <td>AUTO</td> <td>30Hz - 30MHz</td> <td>1 div</td> <td>1V p-p</td> </tr> <tr> <td>NORM</td> <td>3Hz - 30MHz</td> <td>1 div</td> <td>1V p-p</td> </tr> </tbody> </table> <p>(Typical 40MHz at 2 div).</p>	Mode	Freq - Range	INT	EXT	AUTO	30Hz - 30MHz	1 div	1V p-p	NORM	3Hz - 30MHz	1 div	1V p-p
Mode	Freq - Range	INT	EXT										
AUTO	30Hz - 30MHz	1 div	1V p-p										
NORM	3Hz - 30MHz	1 div	1V p-p										
HORIZONTAL DEFLECTION													
Deflection Coefficient	Same as CH2.												
Bandwidth	DC - 1MHz (-3dB).												
Input Impedance	1M ohms and 25pF (approx).												
COMPONENT TESTER / COMPARATOR													
Dual Component Tester allows comparison of V-I characteristics of a Device - Under - Test (D.U.T.) and a sample Device.													
Test Voltage	8.6V r.m.s.												
Test Current	28mA.												
Test Frequency	50Hz or 60Hz.												
GENERAL INFORMATION													
Cathode Ray Tube	140mm Rectangular screen, Internal Graticule, 8 x 10 cm, P31 phosphor.												
Trace Rotation	Front Panel control, allows ± 50 of trace adjustment.												
Z-Modulation	TTL level.												
Calibrator	Provides 0.2V $\pm 2\%$, 1KHz square- wave output for probe compensation.												
Power Requirement	230V AC $\pm 10\%$, 47-65Hz, 40VA.												
Dimensions	165 (H) x 340 (W) x 420 (D) mm.												
Weight	7.5 Kgs. approx.												
Standard Accessories	Instruction Manual, 2 Input BNC Leads.												
Optional Accessories	High impedance switch probe with x1 or x10 attenuation (Model 306), Trolley.												
Environmental Specifications	Normal : 10OC to 40OC RH 85%. Operational : 0OC to 50OC RH 85%.												

ITEM Should be ISO 9001:2015 Certified.

Estimated cost ~ Rs. 20,000/-

Last date & Time of Quotations submission ...10th February 2020 up to 2.00 PM.

Date and Time of opening the quotations ...10th February 2020 at 3.00 PM.

Terms and conditions

1. Quotation should be on the name of the **Head, Department of Physics, University of Rajasthan Jaipur - 302004** and reach this office on time.
2. Quotation received after due date will not be considered in any case.
3. The rate should be C.I.F./F.O.R. Jaipur inclusive of all charges and taxes etc.



HEAD OF DEPARTMENT
Department Of Physics
Head of the Deptt. of Physics
University of Rajasthan, JAIPUR

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