

Dual Channel Powerscope



Description

Aplab Model 3305P is a dual channel Power scope. Two independent channels with differential input permit the floating measurement from the two points in a circuit without reference to the ground. This allows oscilloscope to be safely grounded without the use of opto-isolator or isolating transformer. When not used as powerscope, it can work as full fledged 2 channel oscilloscope with 5mV/div sensitivity on both the channels, giving full B.W. upto 20MHz for the purpose of general use.

Features

- ★ Two Independent channels with Differential Inputs
- ★ Alt or Chop at 100KHz
- ★ Max I/P $\pm 1000V$ dc or 660V ac rms
- ★ x10, x100 Attenuation for large amplitude input signal
- ★ DC - 20MHz Bandwidth
- ★ 50mV/div Sensitivity on Both Channels
- ★ X-Y Operation
- ★ 5mV/div Sensitivity when used as an Oscilloscope
- ★ 40ns/div to 0.2s/div Time Base
- ★ 140mm rectangular CRT with Internal Graticule
- ★ Triggering to 30MHz
- ★ Z modulation
- ★ 8 x 10 cm. Display
- ★ TV Triggering Frame (V) & Line (H)
- ★ LINE Trigger
- ★ Component Tester
- ★ Variable Hold off

Specifications

FLOATING DIFFERENTIAL AMPLIFIER SYSTEM

Input Channels	: A & B (Isolated Inputs).
Bandwidth	: DC - 20MHz. (100:1). DC - 15MHz (10:1).
Attenuation Ratio	: 10:1 , 100:1.
Rise time	: 23ns (10:1) & 17.5ns (100:1).
Input Impedance	: 2M Ω // 10pF.
Max. i/p Voltage	: \pm 1000V dc or 660V ac rms.
Accuracy	: \pm 2%.

VERTICAL DEFLECTION

Deflection Coefficient (CH1 & CH2 as a Powerscope)	: 50mV/div to 200V/div in 12 calibrated steps in 1-2-5 sequence with x10 factor & 500mV/div to 2000V/div with x100 factor.
(CH1 & CH2 as an Oscilloscope)	: 5mV/div to 20V/div in 12 calibrated steps in 1-2-5 sequence.
Display Modes	: CH1 only, CH1 & CH2 Alternate or Chop mode & X-Y.
Internal Trigger Signal	: CH1 or CH2.

TIME BASE

Sweep Speed	: 18 calibrated steps. 0.5 μ s to 0.2s/div in 1, 2 & 5 sequence.
Sweep Magnifier	: x5 Magnification extends the sweep speed to 100ns/div. x5 Magnification indication with LED.
Accuracy Variable	: \pm 3%. Uncalibrated continuously variable control between steps, extends fastest sweep speed to 40ns/div (approx). (Uncal LED indication).

TRIGGER SYSTEM

Triggering Mode	: Automatic or Normal with Level Control.
Source	: CH1 / CH2 / LINE / EXT.
Slope	: Positive or Negative.
Coupling	: ac / dc / HF reject or TV Frame / TV Line.

Hold off Variable	: 4:1 continuously variable for stable triggering.
Trigger Sensitivity	: Int. : AUTO 0.5 div 30Hz - 20MHz NORM 0.5 div 3Hz - 20MHz. Ext. : AUTO 0.8Vp-p 30Hz-20MHz NORM 0.8Vp-p 3Hz-20MHz. (TYPICAL 30MHz at 1 div.)

HORIZONTAL DEFLECTION

Deflection Coefficient	: Same as CH2.
Bandwidth	: DC - 1MHz (-3dB).
Input Impedance	: 1M ohms and 25pF (approx.).

COMPONENT TESTER : Component Tester allows V-I characteristics of a Device - Under Test (D.U.T.).

Test Voltage	: 8.6 V r.m.s.
Test Current	: 28 mA max.
Test Frequency	: 50Hz or 60Hz. (Mains).

GENERAL INFORMATION

Cathode Ray Tube	: 140mm Rectangular screen, Internal Graticule, 8 x 10 cm, P43 phosphor. Accelerating potential : 2 KV.
Trace Rotation	: Front Panel control, allows \pm 5° of trace adjustment.
Z - Modulation	: 30V p-p signal upto 1MHz modulates at normal intensity.
Calibrator	: Provides 0.2V \pm 2%, 1KHz square-wave output for probe compensation.
Power Requirement	: 230V AC \pm 10%, 47-65Hz, 40VA OR 115V AC \pm 10% (On Request).
Dimensions	: 220H x 320W x 420D mm approx.
Weight	: 9.0 Kgs. approx.
Accessories	: Instruction Manual Component Tester Leads. Differential Amp. Input Leads - 2 Nos.
Environmental Specifications	: Normal : 10°C to 40°C RH 85%. Operational : 0°C to 50°C RH 85%.

WE PURSUE A POLICY OF CONTINUOUS DEVELOPMENT AND PRODUCT IMPROVEMENT. THUS THE SPECIFICATIONS IN THIS DOCUMENT AND THE LOCATION OF CONTROLS ON THE FRONT PANEL MAY BE CHANGED WITHOUT NOTICE.

Aplab Test & Measurement Instruments

APLAB LIMITED

APLAB HOUSE, A-5, WAGLE ESTATE, THANE 400 604. INDIA. TEL : 25821861 FAX : 91-022-2582 3137
EMAIL : tmsales@aplab.com WEBSITE : www.aplab.com

- BANGALORE Tel. : 080-23576001 to 07 Fax : 23576008 E-mail : aplabblr@aplab.com
- CHENNAI Tel. : 044-26680472, 26680477 Fax : 26680473 Email : aplabchn@aplab.com
- KOLKATA Tel. : 033-22455435, 22848834 Fax : 22454294 Email : aplabcal@aplab.com
- MUMBAI Tel. : 022-29201787, 29204642, 29203468 Fax : 29209066 Email : aplabwr@aplab.com
- NEW DELHI Tel. : 011-23515183/86, 23627467 Fax : 23634709 Email : aplabnd@aplab.com
- SECUNDERABAD Tel. : 040-27811012, 27843351, 27720339 Fax : 27897788 Email : aplabsec@aplab.com