

The new Hameg HM303 oscilloscope succeeds the popular HM203-7. The bandwidth has been extended from 20 to 30MHz, the sweep rate increased to 10ns/div. and improvements added to the already legendary HAMEG auto triggering system. A key feature of this oscilloscope is the vertical amplifier's pulse fidelity, limiting overshoot to only 1%. The HM303 offers a special fast rise time, 1kHz / 1MHz Calibrator permitting high quality probe compensation across the entire frequency range to ensure probe-tip thru to display integrity. An Overscan Indicator assists in vertical display ampl. and position adjustment. The HM303 is capable of triggering on input waveforms over 100MHz and on signal levels as small as 0.5 division. Alt. triggering mode enables the display of 2 asynchronous sigs simultaneously. An active Video Sync-Sep. allows detailed examination of complex TV sig. inputs. A well proven, built-in Component Tester is now equipped with a stabilized measuring voltage. The use of a switching type of power supply minimizes both weight and power consumption and universally accepts a wide range of input power line voltages, without the requirement to change jumpers or switch positions. The HM303's CRT is fully mu-metal shielded against outside magnetic fields.

Specifications

Vertical Deflection

Operating Modes: Channel 1 or channel II separate
 both Channels (alternate or chopped)
 (Chopper frequency approx. 0.5MHz)

Sum or Difference with Ch.1 and Ch.11 (both channels invertable)

X - Y Mode: Via Channel 1 and Channel 11

Frequency Range: 2 x DC to 30MHz (-3dB)
 Risetime <12nS, Overshoot: <1%

Deflection Coefficients: 12 calibrated steps from 5mV/div. to 20V/div.in
 (1-2-5 sequence.)
 Accuracy in calibrated position: $\pm 3\%$.

Y- Expansion x5: (calibrated) to 1mV/div. $\pm 5\%$ in the frequency
 range DC to 10MHz, (-3dB)

Input Impedance: 1MR II 20pF
 Input coupling: DC-AC-GD(Ground)

Triggering

Input voltage: max 400V(DC + peak AC)
 Automatic: <20Hz - 80MHz, (-0.5div).
 Normal with level control from DC-100MHz
 LED indicator for trigger action
 Slope positive or negative

Sources: Ch.1, or 11, Ch.1 alternating with Ch.11
 line, external

Coupling: AC (10Hz - 100MHz)
 DC(0 to 100MHz), LF(0 to 1.5KHz)

Active TV-Sync separator: (Pos. and neg.)
 External: 0.3p-p from 30Hz to 30MHz

Horizontal Deflection

Time Coefficients: 20 calibrated steps from 0.2s/div. - 0.1 μ s/div
 in 1-2-5 sequence, accuracy in cal. position $\pm 3\%$
 Min. speed incl. variable 2.5:1:0.5s/div. with
 X-Magnifier x10($\pm 5\%$); 10nS/div.($\pm 8\%$)
 Hold-off time: variable to approx. 10:1

Bandwidth X-Amplifier: DC - 3MHz (-3dB)
 Input X-Amplifier via Channel II

X-Y Phase shift: <3% below 120kHz.

Component tester

Test Voltage: Approx. 6Vrms (open circuit)
 Test Current: Approx. 5mA rms (shorted)
 Test Frequency: Approx. 50Hz
 Test Connection: 2 banana jacks 4mm. One test lead is grounded.

Mains Input: 90vAC to 260vAC
Dimensions: 285 x 125 x 380mm (WxHxD)
Accessories Supplied: Line cord, Operators manual,
2 x Probes 1:1/10, : HZ36