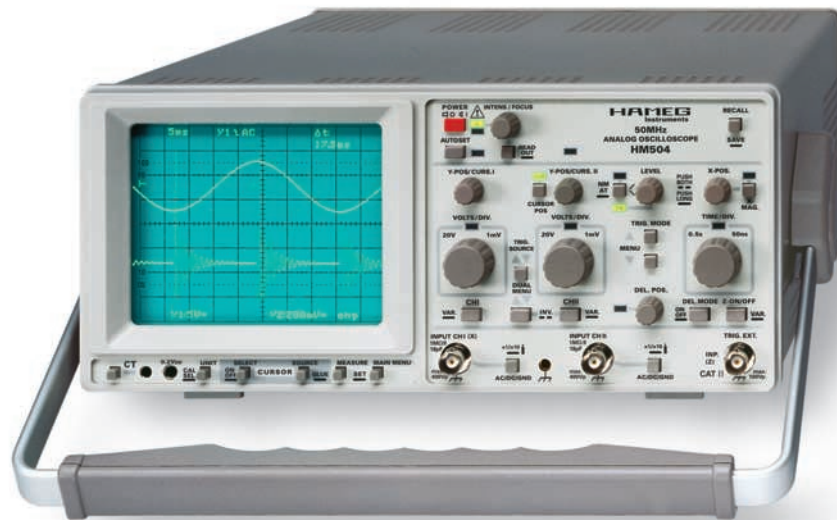
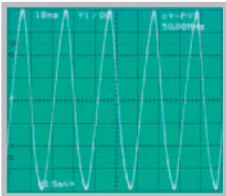


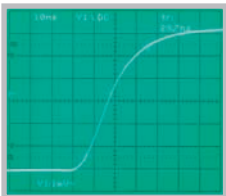
50 MHz Analog Oscilloscope HM504-2



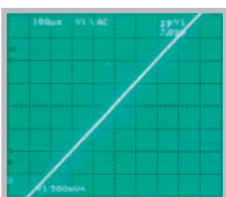
Wide dynamic range of vertical amplifiers allows full screen display of 50 MHz sine wave



Rise-time measurement with cursors



Optimum deflection linearity



2 Channels with deflection coefficients of 1 mV – 20 V/cm, Low Noise, Time Base 0.5 s – 50 ns/cm (with X magnification to 10 ns)

Triggering from 0 to 100 MHz from 5 mm signal level

Time Base delay provides allows high X Magnification of any portion of the signal

Automatic amplitude, frequency (up to 100 MHz) and period measurement

Maximum of 1 million signal displays per second in optimum analog quality

RS-232 interface (for parameter queries and control only)



50 MHz Analog Oscilloscope HM504-2

Valid at 23 °C after a 30 minute warm-up period

Vertical Deflection

Operating Modes:	Channel I or II only Channels I and II (alternate or chopped) Sum or Difference of CH I and CH II
Invert:	CH II
XY Mode:	CH I (X) and CH II (Y)
Bandwidth:	2 x 0 - 50 MHz (-3 dB)
Rise Time:	< 7 ns
Overshoot:	max. 1 %
Deflection Coefficient:	1-2-5 Sequence
1 mV/div. - 2 mV/div.:	± 5 % (0 - 10 MHz (-3 dB))
5 mV/div. - 20 V/div.:	± 3 % (0 - 50 MHz (-3 dB))
Variable (uncalibrated):	> 2.5:1 to > 50 V/div.
Input Impedance:	1 MΩ II 18 pF
Input Coupling:	DC, AC, GND (ground)
Max. Input Voltage:	400 V (DC + peak AC)

Triggering

Automatic (Peak to Peak):	20 Hz - 100 MHz (≥ 5 mm)
Normal with Level Control:	0 - 100 MHz (≥ 5 mm)
Slope:	positive or negative
Sources:	Channel I or II, CH I/CH II alternate (≥ 8 mm), Line and External
Coupling:	AC (10 Hz - 100 MHz), DC (0 - 100 MHz), HF (50 kHz - 100 MHz), LF (0 - 1.5 kHz)
Trigger Indicator:	LED
Triggering after Delay:	with Level Control and Slope selection
External Trigger Signal:	≥ 0.3 V _{pp} (0 - 50 MHz)
Active TV sync. separator:	Field and Line, +/-

Horizontal Deflection

Time Base:	0.5 s/div. - 50 ns/div. (1-2-5 Sequence)
Accuracy:	± 3 %
Variable (uncalibrated):	> 2.5:1 to > 1.25 s/div.
X Magnification x 10:	up to 10 ns/div. (± 5 %)
Accuracy:	± 5 %
Delay (selectable):	140 ms - 200 ns (variable)
Hold-Off Time:	variable to approx. 10 : 1
XY	
Bandwidth X amplifier:	0 - 3 MHz (-3 dB)
XY Phase shift < 3°:	< 120 kHz

Operation / Readout / Control

Manual:	via controls
Autoset:	automatic signal related parameter settings
Save and Recall:	9 instrument parameter settings
Readout:	display of menu, parameters, cursors and results
Autom. Measurement:	Freq./Period, Vdc, Vpp, Vp+, Vp-, Trigger Level
Cursor Measurement:	Δt, 1/Δt, tr, ΔV, V to GND, Gain, Ratio X and Y
Frequency counter:	4 digit (0.01 % ± 1 digit) 0.5 Hz - 100 MHz
Interface (standard fitting):	RS-232 (for control)

Component Tester

Test Voltage:	approx. 7 V _{rms} (open circuit)
Test Current:	max. 7 mA _{rms} (short-circuit)
Test Frequency:	approx. 50 Hz
Test Connection:	2 banana jacks 4 mm Ø

One test circuit lead is grounded via protective earth (PE)

Miscellaneous

CRT:	D14-363GY, 8 x 10 cm with internal graticule
Acceleration Voltage:	approx. 2 kV
Trace Rotation:	adjustable on front panel
Z-input (Intens. modulation):	max. + 5 V (TTL)
Calibrator Signal (Square Wave):	0.2 V ± 1 %, 1 Hz - 1 MHz (tr < 4 ns), DC
Power Supply (Mains):	105 - 253 V, 50/60 Hz ± 10 %, CAT II
Power Consumption:	approx. 34 Watt at 230 V/50 Hz
Ambient temperature:	0° C...+ 40° C
Safety class:	Safety class I (EN61010-1)
Weight:	approx. 5.4 kg
Dimensions (W x H x D):	285 x 125 x 380 mm

Accessories supplied: Line Cord, Operators Manual and Software for Windows on CD-ROM, 2 Probes 1:1 / 10:1

Optional accessories: Opto Interface (with optical fiber cable) HZ70

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