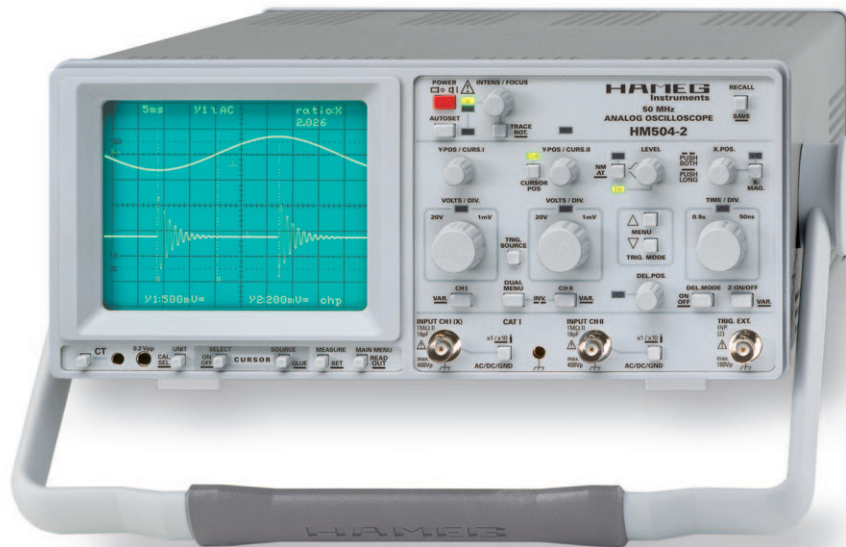
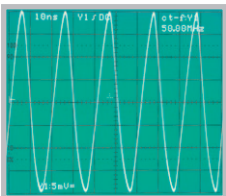


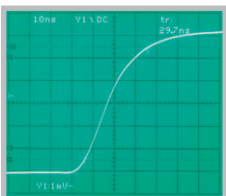
50 MHz Analog Oscilloscope HM504-2



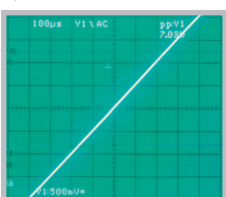
Wide dynamic range of vertical amplifiers allows full screen display of 50 MHz sine wave



Rise-time measurement with cursors



Optimum deflection linearity



2 Channels with deflection coefficients of 1 mV/cm – 20 V/cm

Time Base: 0.5 s/cm – 50 ns/cm,
with X Magnification to 10 ns/cm

Low Noise Measuring Amplifiers with high pulse fidelity

Triggering from 0 to 100 MHz from 5 mm signal level

Time Base delay provide high X Magnification
of any portion of the signal

100 MHz 4-Digit Frequency Counter,
Cursor and Automatic Measurement

Save/Recall Memories for Instrument Settings

Readout, Autoset, no Fan

Yt, XY and component-test modes

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 > 50V/div. |
| Input Impedance: | 1 MΩ II 18 pF |
| Input Coupling: | DC, AC, GND (ground) |
| Max. Input Voltage: | 400V (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. + 5V (TTL) |
| Calibrator Signal (Square Wave): | 0.2V ± 1 %, 1 Hz - 1 MHz (tr < 4 ns), DC |
| Power Supply (Mains): | 105 - 253V, 50/60 Hz ± 10 %, CAT II |
| Power Consumption: | approx. 34 Watt at 230V/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 (HZ154)

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

www.hameg.com