



ABN 43 064 478 842

➤ 231 osborne avenue clayton south, vic 3169
PO box 1548, clayton south, vic 3169
t 03 9265 7400 f 03 9558 0875
freecall 1800 680 680
www.tmgtestequipment.com.au

Test & Measurement

- sales
- rentals
- calibration
- repair
- disposal

Complimentary Reference Material

This PDF has been made available as a complimentary service for you to assist in evaluating this model for your testing requirements.

TMG offers a wide range of test equipment solutions, from renting short to long term, buying refurbished and purchasing new. Financing options, such as Financial Rental, and Leasing are also available on application.

TMG will assist if you are unsure whether this model will suit your requirements.

Call TMG if you need to organise repair and/or calibrate your unit.

If you click on the “Click-to-Call” logo below, you can call us for FREE!

TMG Corporate Website

TMG Products Website



Click-to-Call
TMG Now

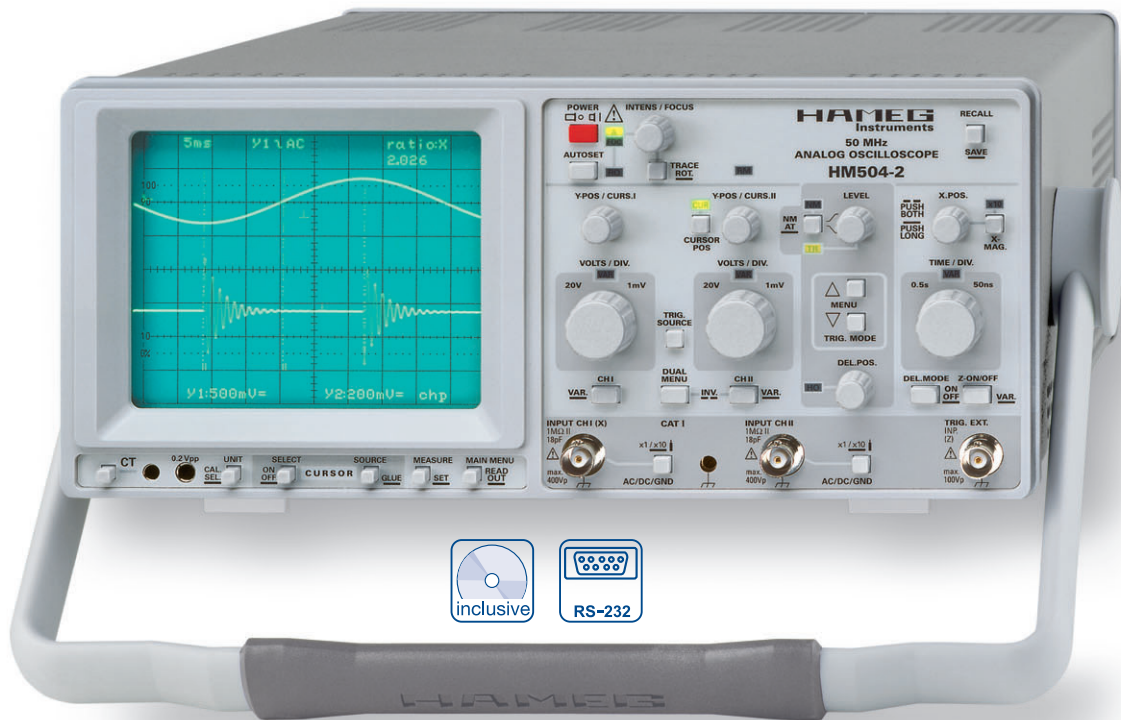


Disclaimer:

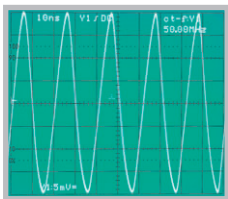
All trademarks appearing within this PDF are trademarks of their respective owners.



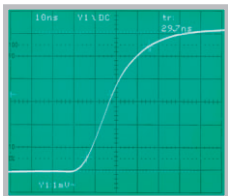
50 MHz Analog Oscilloscope HM504-2



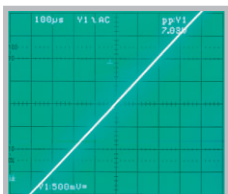
Full screen display of
50 MHz sine wave



Rise-time measurement
with cursors



Optimum deflection linearity



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

Time Base: 0.5s/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 5mm 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
Deflection Coefficient:	1-2-5 Sequence 1 mV/div. – 2 mV/div.: $\pm 5\%$ (0 – 10 MHz (-3 dB)) 5 mV/div. – 20 V/div.: $\pm 3\%$ (0 – 50 MHz (-3 dB)) Variable (uncalibrated): > 2.5:1 to > 50 V/div.
Input Impedance:	1 M Ω 15 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:	$\geq 0.3 V_{pp}$ (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:	$\pm 3\%$
Variable (uncalibrated):	> 2.5:1 to > 1.25 s/div.
X Magnification x 10:	up to 10 ns/div. ($\pm 5\%$)
Accuracy:	$\pm 5\%$
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 , $1/\Delta t$, tr, ΔV , V to GND, Gain, Ratio X and Y
Frequency counter:	4 digit (0.01 % \pm 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 \varnothing

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 \pm 1 %, 1 Hz – 1 MHz (tr < 4 ns), DC
Power Supply (Mains):	105 – 253 V, 50/60 Hz \pm 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 (HZ154)

Optional accessories:

HZ70 Opto Interface (with optical fiber cable)

www.hameg.com