SKY MESSTECHNIK

RIGOL's
DS5000 SERIES
DIGITAL STORAGE OSCILLOSCOPE

NEW STANDARD FOR PERFOMANCE/PRICE

FEATURES

Easy-to-read LCD Display
Dual channel, bandwidth: 5MHz to 200MHz per channel
Sample Rate (Real-time): up to 1GSa/s
Equivalent Sampling: up to 50GSa/s
Advanced Triggering on edge, video, pulse, delay
20 Automatic Measurements, Manual Cursor Measurement
10 waveorms, 10 setups storage
+, -, x, /, Mathematic Functions
Edge, video, pulsewidth, delay triggering
Built in FFT & USB interface
Automatic Calibration
Exclusive Digital Filter & waveforms recorder
Hardware frequency counter
Capture rate over 1k waveforms/s
10 Languages user interface
Built in help
Optional Extend Module: Pass/Fail output; RS-232/GPIB Interface

CURSOR
Type: Voltage, Time

HORIZONTAL CONTROL
Ultra-zoom, YT/XY: time domain waveform and lissajous graph, Memory/Trigger position.

STORAGE/RECALL
Waveform storage: store and display 10 waveforms (each includes Ch1 & Ch2). Setup storage: store and recall 10 instruments working config.

CH1/CH2 CHANNELS
Coupling: AC/ DC/ GND
Probe attenuation:
1:1/ 10:1/ 100:1/ 1000:1

HIDDEN MENU
The Screen Menu can be hidden to gain a wider viewing area.

AUTO-SETUP
It makes horizontal, vertical and trigger system of channels to the best display effect with only one push on the display.

DISPLAY SYSTEM
Color-LCD (DS5000CA/C series), adjustable contrast, 320x240 resolution, VGA color.
Mono-LCD (DS5000MA/M series), adjustable contrast, 320x240 resolution, B/W.

AUTOMEASUREMENT
V_{pp}, V_{max}, V_{min}, T_{top}, V_{base}, V_{amp}, V_{avg}, V_{rms}, Overshoot, Preshoot, Frequency, Period, Rise Time, Fall Time, Delay1-2, +Width, -Width, +Duty, -Duty.

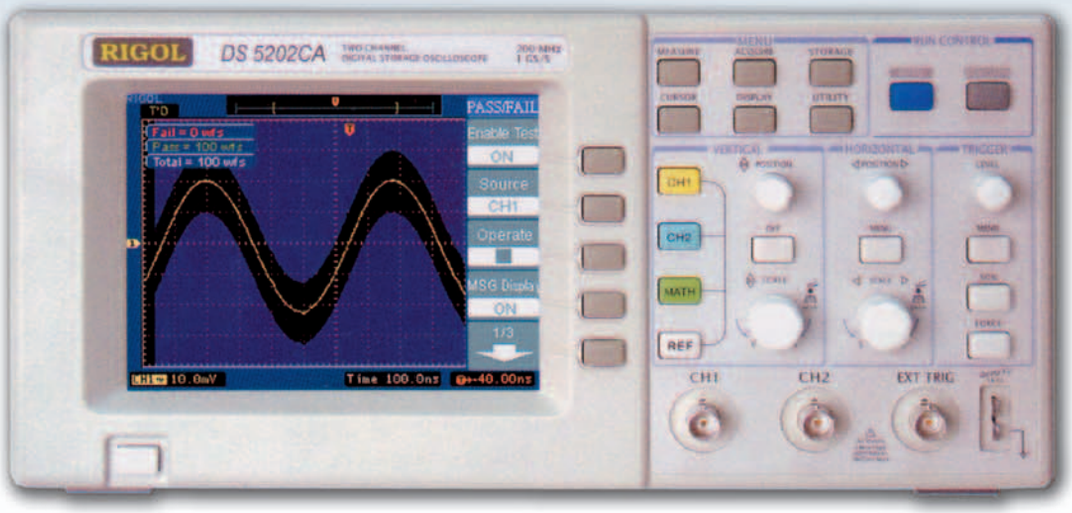
UTILITY
Pass/Fail detection, Waveform recorder, Frequency Counter, Beeper Sound, Self-test, Self-calibration, I/O Setup, Multi-Language.

TRIGGER SYSTEM
Trigger mode: Edge, Video, Pulse, delayed.
Trigger method: Auto, Normal, Single.
Trigger source: CH1, CH2, EXT, EXT/5, AC line.
Trigger Coupling: DC, AC, HF, Rej., LF Rej.

SAMPLING SYSTEM
Real-Time: sampling rate up to 1GSa/s.
Equivalent-Time:sampling rate up to 50GSa/s.
Average: The averaged waveforms is a running average over a specified number of aquisitions.
Reduced random or uncorrelated noise in signal display.

MATHEMATIC FUNCTION
Add, Subtract, Multiply, divided, and build in Fast Fourier Transform (FFT). Digital Filter: HPF, LPF, BPF, BRF.
bandwidth Limit: limits channel bandwidth to 20MHz.

DISPLAY METHOD
Dots display, Vectors display, Infinite display.

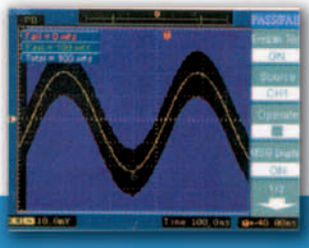


SIMPLE FRONT PANEL

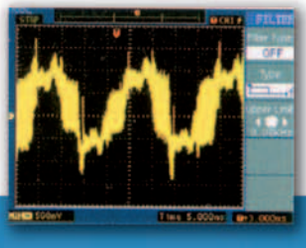
The DS5000 series digital storage oscilloscope has a simple but distinct panel front for all basic operations. Operations are easy and intuitionistic. Instrument adjustment is as simple as pressing a button.

REMARKABLE DIGITAL PERFOMANCE

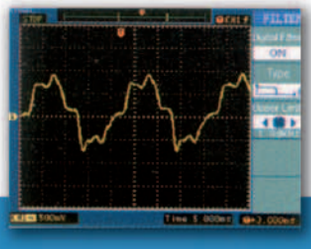
The New DS5000 series digital storage oscilloscope is not only easy to use but also remarkable in perfomance and low price. It has up to 200MHz bandwidth, 1GSa/s real-time sampling and 50GSa/s Eqivalent-time sampling. The instrument is helpful to view faster, more complex signals. The powerful-trigger and analysis functions make the waveform catching analysis easy.



Pass/Fail rules can be edited and saved, hardware output available in optional module.



Digital Filter (OFF)



Digital Filter (ON)

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The DS5000 Series DSO's are easy to use with familiar controls and high display update rate. A colour LCD or a mono LCD is used for bright and clear display. Storage is as simple as pressing a button. Pre Trigger allows the viewing of events before the trigger event. Cursors and automatic measurements greatly simplify the analysis of these events. FFT Math function is built-in the DSO. Upgrading the DSO with an interface module make possible the communication with a PC.

A RIGOL DSO perfectly suits your demanding test applications by delivering fast setup and data transfer speed, flexible resolution, high sampling rate, deep memory, long acquisition records, advanced trigger types and reduced size.

MODELS AND OPTIONS :

VGA (Colour) Display:

5062C	60MHz	250 MSa/s
5062CA	60MHz	1 GSa/s
5102C	100MHz	25 MSa/s
5102CA	100MHz	1 GSa/s
5152C	150MHz	250 MSa/s
5152CA	150MHz	1 GSa/s
5202CA	200MHz	1 GSa/s

LCD (Mono) Display:

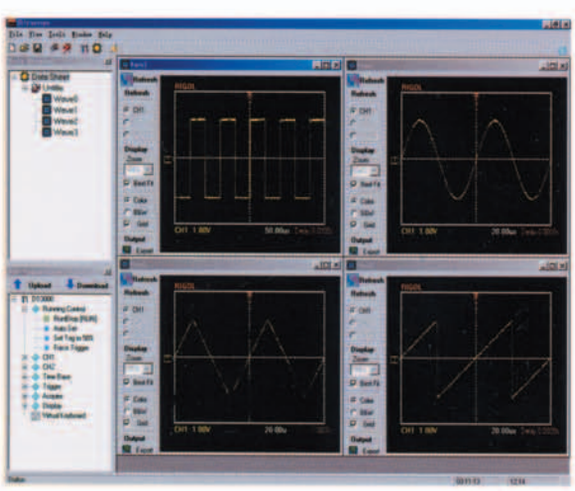
5022M	25MHz	250 MSa/s
5042M	40MHz	250 MSa/s
5062M	60MHz	250 MSa/s
5062MA	60MHz	1 GSa/s
5102M	100MHz	250 MSa/s
5102MA	100MHz	1 GSa/s
5152M	150MHz	250 MSa/s
5152MA	150MHz	1 GSa/s

EM5- CM Interface RS232/GPIB /Software
EM5- COM Interface RS232/GPIB /Software

ULTRASCOPE - PC CONTROL AND ANALYSIS SOFTWARE

The Ultrascope software provides the following control and analysis features:

- Use Data Bowser to display captured waveforms, data and measurements.
- Use DSO Controller to control the Oscilloscope locally or over the network.
- Export the waveform in „BMP" format.
- Save the data into „TXT" or „Excel" file for analysis.
- Print waveforms.



EXTENSION MODULE

EM5-CM
GPIB & RS-232 Communication
Pass/Fail

EM5-COM
GPIB & RS-232 Communication

SPECIFICATIONS

All specifications are guaranteed unless noted „typical". The instrument must have been warmed-up for 30 min, in an enviroment temperature within +/- 5°C of calibration temperature.

VERTICAL DEFLECTION

Number of Channels:	2 Channels
Bandwith :	depends on model Mono 2x 25-150MHz Colour 2x 25-200MHz
Deflection coefficient:	2mV/Div.- 5V/Div
Input impedance:	1MOhm II 13pF
Input coupling:	DC, AC, GD (ground)
Input voltage:	max.400V (DC+AC peak)

TRIGGERING

Sources:	CH I or II
Trigger Mode:	Auto, Normal, Single
Trigger Type:	Edge, TV, Pulse, Delay

HORIZONTAL DEFLECTION

Time Base:	depends on model 50s/Div. – 5 to 1ns/Div.
Bandwith X-Amplifier: depends on model	0-200 MHz
Vertical resolution:	8 bit
X-Y Phase shift:	3° Degrees
XY Mode:	over Channel 1 and 2

STORAGE MODE

Sample Rate:	depends on model 250MSa/s or 1GSa/s
Equivalent Sampling:	50GSa/s
Memory:	4k – 1M per channel
Rise Time:	depends on model 5.8 – 1,8ns

MEASUREMENT

Auto Measure:	Vpp, Vmax, Vmin, Vavg, Vamp, Vtop, Vbase, Vrms, Overshoot, Frequency, Period, Risetime, PulseWidth, Duty, Delay
Cursor Measure:	Manual, Trace, Auto Measure
Math:	Add, subtract, multiply, divide, FFT
Storage:	10 waveforms, 10 setups

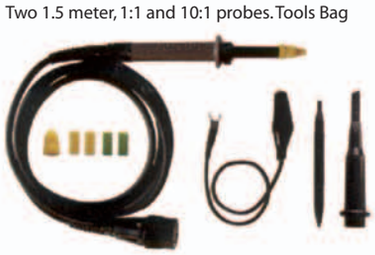
GENERAL INFORMATION

Display:	VGA or LCD 320x240
Line voltage:	100~240V/ 50/60Hz
Power consumption:	max. 50VA
Weight:	4,5 kg
Size:	303 x 145 x 288 mm

Subject to change without notice.04/05
detailed information see www.sky-messtechnik.de

ACCESSORIES

Two 1.5 meter, 1:1 and 10:1 probes. Tools Bag



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