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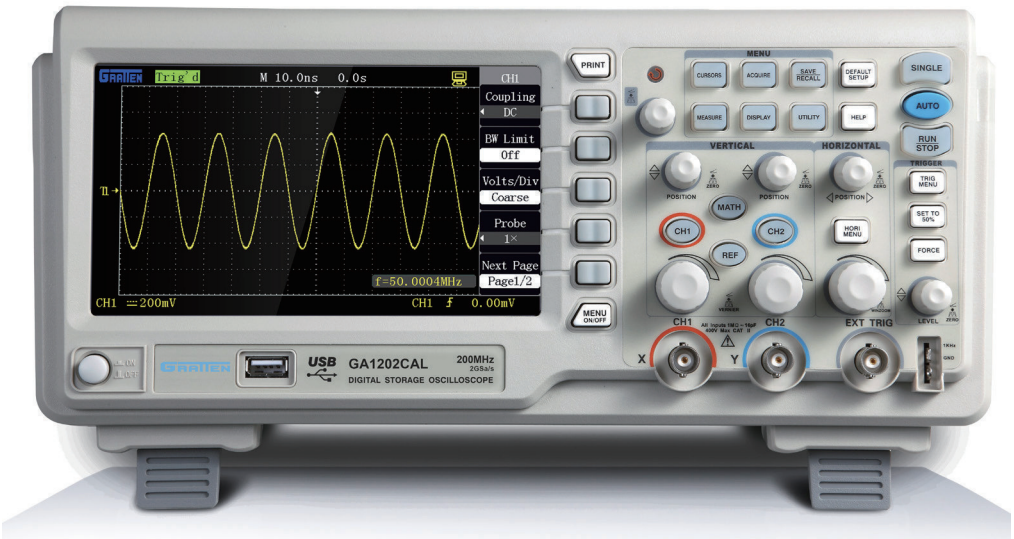
GA1000 Series Digital Storage Oscilloscope

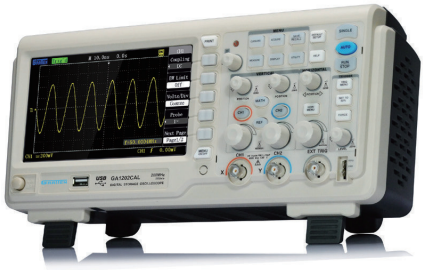


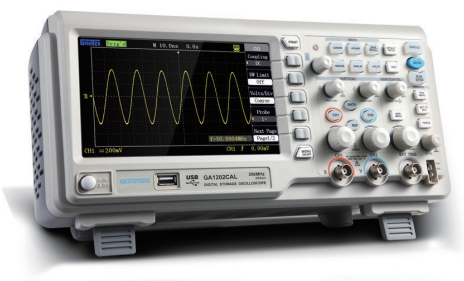
Summary

GA1000 Series is a two channels, 1GSa/s、2GSa/s sampling rate digital storage oscilloscope. It has easy-to-keyboard layout and high-definition 7-inchTFT color LCD display, providing clear and more stable waveform display; supporting picture copy function. With top performance, powerful function and competitive price, the digital oscilloscope can be widely applied in many fields of science education, enterprises research and development and industrial production.

Main features

- 2 analog channels, Max 200MHz bandwidth, 40Kpts memory depth, 1Gsa/s sampling rate
- Various trigger functions: Edge, Pulse, Video, slope and Alternation
- 32 kinds of automatic measurement and manual cursor tracking measurement functions
- Pass/fall function
- Flexible waveform recording and playback function
- Standard configuration port: USB Device, USB Host, RS232
- Various kinds of language interface display
- Support storage of USB flash disk and upgrading system software by USB. Support PC connection for remote communication





Technical Parameters

GA1000CAL/CAM Series

Model	GA1062CAL (GA1072CAM)	GA1102CAL (GA1112CAM)	GA1202CAL (GA1202CAM)
Bandwidth	60MHz (70MHz)	100MHz (110MHz)	200MHz
Real-time Sampling Rate	1Gsa/s		
Storage Depth	40Kpts； 2Mpts（only CAM Series）		
Rise Time	＜5.8ns	＜3.5ns	＜1.7ns
Input Impedance	1MΩ±2%‖16±3pF		1MΩ±2%‖20±3pF 50Ω 5vrms
Time Base	5ns-50s/div (step-by-step 1-2-5)	5ns-50s/div (step-by-step 1-2-5)	2ns-50s/div (step-by-step 1-2-5)
Vertical Sensitivity	2mV-10V/div (step-by-step 1-2-5)(CAL)；2mV-5V/div (step-by-step 1-2-5)(CAM)		

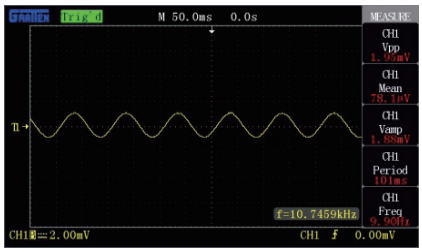
GA1000CEL/CEM Series

Model	GA1112CEL (GA1112CEM)	GA1202CEL (GA1202CEM)	GA1302CEL (GA1302CEM)
Bandwidth	110MHz	200MHz	300MHz
Real-time Sampling Rate	2Gsa/s		
Storage Depth	40K (only CEL Series)、2M (only CEM Series)		
Rise Time	＜3.5ns	＜1.7ns	
Input Impedance	1MΩ±2%‖16±3pF		1MΩ±2%‖20±3pF 50Ω 5vrms
Time Base	2ns-50s/div (step-by-step 1-2-5)	1ns-50s/div (step-by-step 1-2-5)	1ns-50s/div (step-by-step 1-2-5)
Vertical Sensitivity	2mV-5V/div (step-by-step 1-2-5)		

GA1000DAL/DEL Series

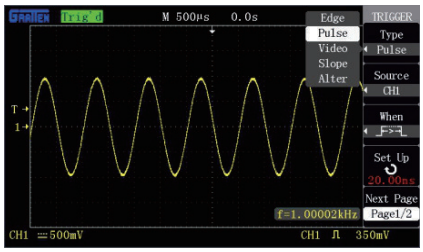
Model	GA1072DAL	GA1102DAL	GA1202DAL/DEL	GA1302DEL
Bandwidth	70MHz	110MHz	200MHz	300MHz
Real-time Sampling Rate	1Gsa/s (only DAL Series)； 2Gsa/s (only DEL Series)			
Storage Depth	40Kpts			
Rise Time	＜5.8ns	＜3.5ns	＜1.7ns	
Input Impedance	1MΩ±2%‖16±3pF		1MΩ±2%‖20±3pF 50Ω 5vrms	
Time Base	2ns-50s/div	2ns/div-50s/div (1-2-5)(Only DAL Series) 1ns/div-50s/div (1-2-5)(Only DEL Series)		
Vertical Sensitivity	2mV-10V/div (step-by-step 1-2-5)		2mV-5V/div (step-by-step 1-2-5)	
Vertical Resolution	8 bits			
Channels	2			
Trigger Signal Source	CH1, CH2, EXT, EXT/5, AC LINE			
Trigger mode	Edge、Pulse、Video、Slope、Alternate			
Arithmetical operation	+, −, ×, ÷, FFT			
Digital Filtering	High pass、Low pass、Band elimination、Band pass			
Max Input Voltage	400V （DC+AC peak, 1MΩinput impedance）			
Internal Storage	2 groups of reference waveform，20 groups of setups，16 groups of waveform			
External Storage	Save and recall waveform from USB flash drive, Setups, CSV and bitmap files are supported			
Display Language	Simplified Chinese, Traditional Chinese, English, French, German, Korean, Italian, Spanish, Portuguese, Russian			
Port	USB Host, USB Device, RS-232, Pass/Fail out			
Display	TFT 7-inch (178mm)LCD			
	800 (horizontal)pixels × 480 (vertical)pixels			
Power Voltage	100~240V (AC), 45~440Hz, 30VA Max			

Features



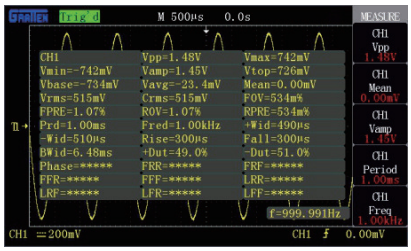
Small signal capture

Better noise function with excellent performance, accurately captures even the faint signal giving you the confidence in testing.



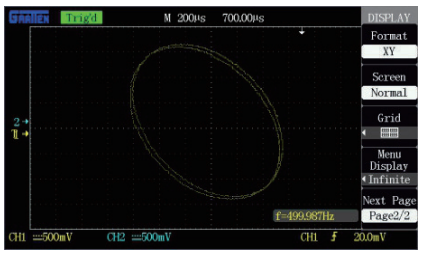
Advanced trigger settings

Various triggering options are available to capture any signal of interest with Edge, slope, video, pulse, width, alternating triggering modes. This gives you flexible observation, analysis signal types, saving the cost of testing.



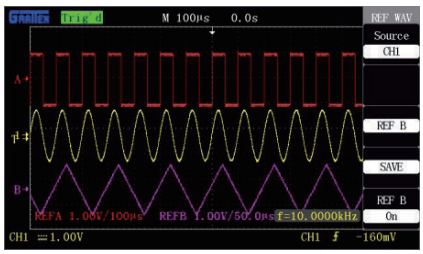
Automatic measurement function

The full featured acquisition model and 32 automatic measurement functions help user to measure captured waveform parameters more accurately. Auto measure function can eliminate user error consumedly, and users will measure parameters what they need faster and more accurately using it.



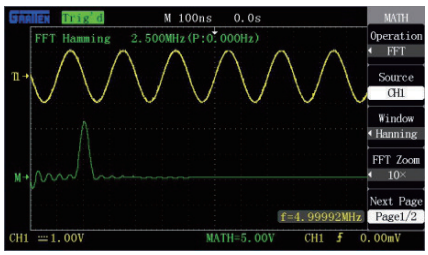
XY mode display

Use XY format to analyze phase. In this mode the data is displayed as dots.



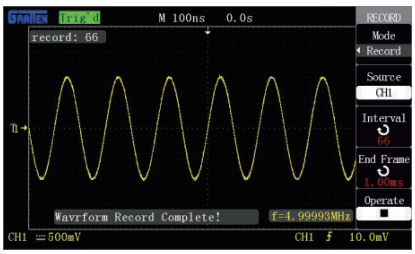
Reference waveform storage

Two reference waveforms can be stored into the internal memory and can be opened simultaneously, thus showing the sample and reference waveforms in comparison.



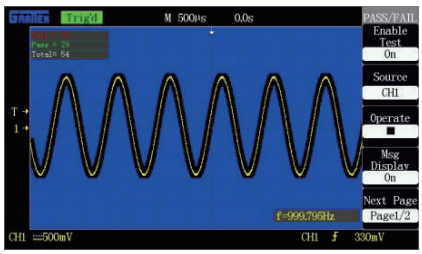
FFT split-screen display

FFT waveform and its Channel waveform can display on split screen at the same time. In split display mode, the screen is divided is divided into two parts and each part is divided eight divides in vertical direction. User can observe and analyze two waveforms simultaneously making it more clearer and convenient.



Waveform recording/playback

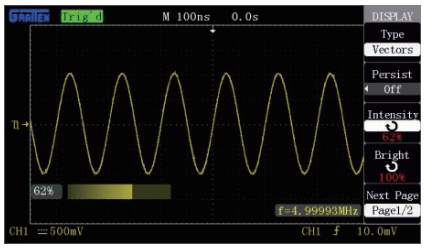
Wavefomr recorder can record input waveform form CH1 and CH2, with maximum recod length of 1000 frames. This record behaviour can also be activated by the pass/fail test output which makes this function specially useful to capture abnormal signals in long term without keeping an eye watching it.



Pass/Fail

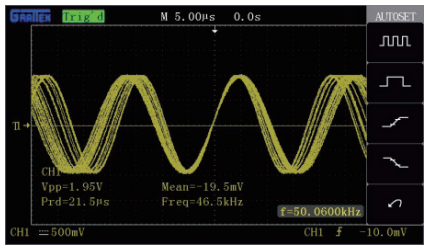
Users may use the Pass/Fail function to carry on the product test. Through a series of setups, the oscilloscope can output the test result automatically which enhanced the product production efficiency greatly.

User-friendly Design



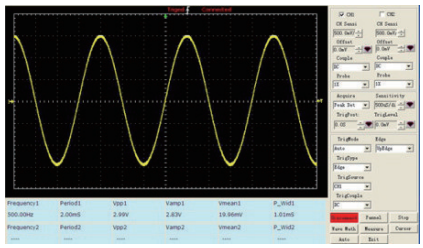
A waveform adjustable brightness

Waveform brightness adjustable to clearly observe the waveforms. The screen displays parameter value and the waveforms are visible clearly and form a broad range of viewing angle.



Signal persistence view

Display the signal path of the frequency. When acquisitions are stopped, the screen may show data from many acquisitions or the last acquisition. The past acquisition can be displayed based on 4 different time based options of (1-2-5-infinite).



PC software

Easy to use PC control software is the easiest and convenient way to remotely capture and analyzer the waveform data. This software can be compatible RS-232 and USB Device to communicate between the computer and the oscilloscope useful for remote operation. It can automatically refresh realtime waveform data, provide waveforms sampling data, read storage and printing functions.