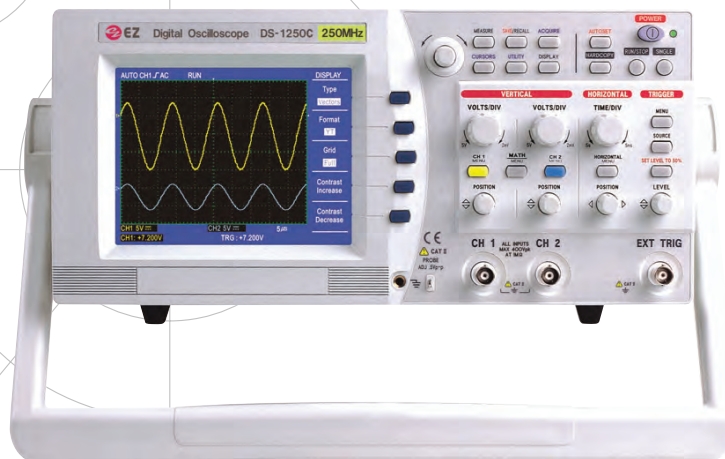


DS-1000SRS

Model DS-1000SRS Color/Mono Series are featured with DC to 250MHz, maximum 100MS/s realtime sampling per channel (Maximum of one channel: 200MS/s), equivalent sampling rate of 25GS/s.

Its 16bit high speed microprocessor adoption enables to acquire maximum 100,000 points per second and prompt update the picture on the screen.

Its basic memory capacity is 32KBytes and captured waveforms can be zoomed in and analyzed in detail. Also its built-in 10ns peak detection circuit enables to capture high frequency noise at a low speed time/div and magnify and analyze it using the zoom-in function. It can save up to 10 waveforms and provides diversified analysis function like FFT which is available at high-end products.



General Features

- Frequency Bandwidth : DC~ 80MHz : DS-1080C / DS-1080
: DC~100MHz : DS-1100C / DS-1100
: DC~150MHz : DS-1150C / DS-1100
: DC~250MHz : DS-1250C / DS-1250
- 5.7" Color / Mono LCD Display, 2 CH Dual Digitizer
- 100MS/s Simultaneous Maximum Sampling Rate per channel.
200MS/s Sampling Rate for one channel only
25GS/s Equivalent Sampling Rate per channel
- High Speed Screen Update using 16bit μ -Processor
- 10ns Peak Detection for Glitch Capture

Convenient Functions

- Long Memory Max. 32KBytes/CH for flexible Waveform Zoom In/Out
- Direct Single Trigger Capture Function using a hot-key
- Simultaneous 5 Waveform information
- Auto measurement and FFT Analysis
- Auto Trigger Level Setting to 50%
- Saving 10 Waveforms & 10 setup parameters
- Hold-Off
- Fast Trigger On/Off
- Convenient inserting interface card for RS-232C, Hardcopy and USB

Function

Automatic measurement

Max. 5 parameters can be set and measured simultaneously.
PK-PK,RMS,Mean,Rising time, Falling time, Period, Positive width, Negative width, Frequency, Duty

Save & Recall function

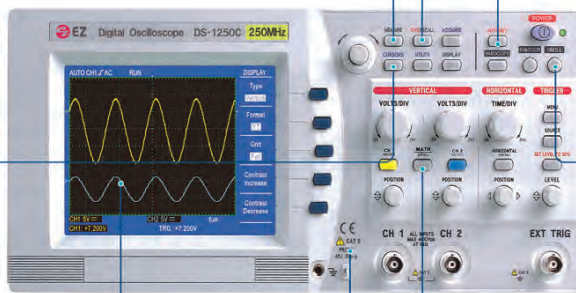
Up to 10 waveforms and 10 setup parameters save and recall are available respectively.
A factory setup recall, too.

AUTOSET

Automatic setup function for an optimum display of input signals in the vertical and horizontal axis and trigger.

Cursor measurement

Two horizontal and vertical cursors are useful to measure parameters of waveform amplitude (ΔV) and times ($\Delta t, t, \Delta t/t$).



Direct single trigger capture

Just pressing the SINGLE button enables you to see a single triggering event on the screen with ease.

5.7 inch TFT LCD Display

Its brightness and contrast are easily adjusted using a menu button or a control knob

FFT function

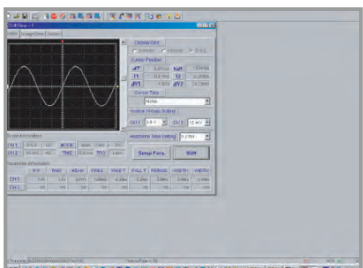
The function displays the captured signals both in the time domain and in the frequency domain and compares and measures the signals with ease simultaneously.

Quality and safety certifications

The family series conforms to safety standard CE and UL or cUL and ISO 9001 standard.

Software SoftView and Communication module [Option]

A communication module supports USB, RS-232C interface and hardcopy printer connecting with a PC. The USB function allows faster and larger data communication between PC and oscilloscope at a lower cost than GPIB, for which requires an additional installation of a special device. A software kit includes software program SoftView and RS-232C and USB interface cables together.



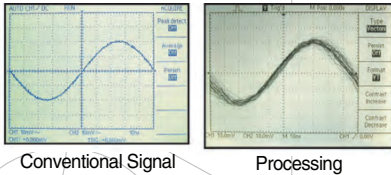
Software SoftView



Communication module

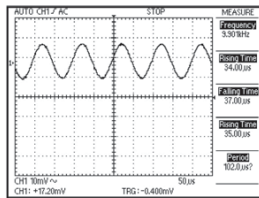
Function

Precise vertical accuracy



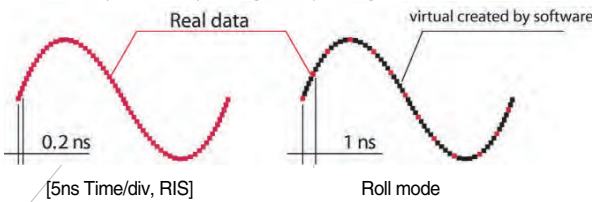
A major quality factor of oscilloscopes is vertical accuracy. The series offers excellent accuracy and a low noise ratio. In ensuring precise vertical accuracy, a conventional analog signal processing technique exceeds CCD (Charge Coupled Devices) processing technique of FISO (Fast In Slow Out) sampling, which limits horizontal and vertical resolution and shows more noises and higher error rate.

Automatic measurement of waveform parameters



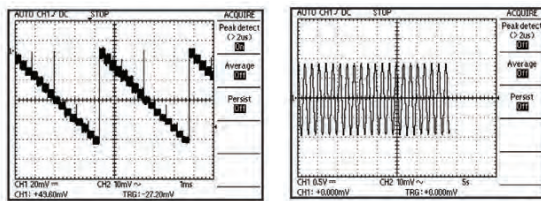
The DS-1000 Series automatically measures the frequency, voltage and RMS values of a waveform. Maximum 5 parameters are set and simultaneously measured. Total 10 parameters are available: PK-PK, RMS, Mean, Rising time, Falling time, Period, Positive width, Negative width, Duty, Frequency.

RIS (Random Interleaved Sampling) for better measurement of repetitive waveforms



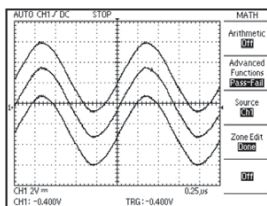
RIS sampling allows much more precise observation of repetitive waveforms. The DS-1000 Series adopts TDC (Time to Digital Converter) technique and displays all real data with equality at 10GS/s at 5ns Time/div unlike oscilloscopes using software interpolation like sinc interpolation, which interconnects sampled points with virtual data not real data.

FFT (Fast Fourier Transformation) function



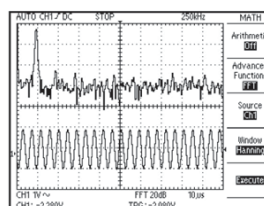
In this mode, input signals are displayed both in the time domain and in the frequency domain. The mode, therefore, is useful to compare and measure the signals at the same time.

Pass/fail judgment



Once the zones for the waveform of an acquired signal are set, the DS-1000 Series tests the signal measured.

FFT (Fast Fourier Transformation) function



In this mode, input signals are displayed both in the time domain and in the frequency domain. The mode, therefore, is useful to compare and measure the signals at the same time.

Specifications

SPEC	MODEL	DS-1080C	DS-1100C	DS-1150C	DS-1250C	
		DS-1080	DS-1100	DS-1150	DS-1250	
ACQUISITION	Max. Sample rate	200MSPS for one channel only, 100MSPS/CH(real time).		25GSPS/CH(equivalent)		
	Record length	Long Memory Max. 32KBytes / CH				
	Peak detect	Captures & displays as narrow as 10ns GLITCH				
VERTICAL	Frequency bandwidth	DC to 80MHz(40MHz at 2mV/div)	DC to 100MHz(40MHz at 2mV/div)	DC to 150MHz(40MHz at 2mV/div)	DC to 250MHz(60MHz at 2mV/div)	
	Input Channel	CH1, CH2				
	Volts/Div	2mV/div ~ 5V/div				
	Input Impedance	1Mohm \pm 1.5% // Approx. 16pF				
	Max. Input volt	400V(DC+AC Peak)(AC <1kHz)				
	Accuracy	\pm 3%				
	Input coupling	DC, AC, GND				
	Rising time	Approx. 4.3ns	Approx. 3.5ns	Approx. 2.3ns	Approx. 1.4ns	
MATH		Arithmetic(ADD, SUBTRACT, INVERSION) FFT : Hamming, Hanning and Rectangular Window Pass-Fail : Editable waveform zone				
HORIZONTAL	Time/Div	Equivalent : 2ns/div ~ 0.1 μ s/div Real time : 0.25 μ s/div ~ 0.1 s/div Roll mode : 0.2s/div ~ 5s/div				
	Resolution	80ps				
	Accuracy	0.01%				
	Pre trigger	Max. 10div				
	Magnification	ZOOM IN / OUT				
TRIGGER	Mode	AUTO, NORMAL, SINGLE				
	Coupling	DC, AC, LF REJECT, HF REJECT				
	Type	Edge, TV				
	Slope	Rising, Falling				
	Level	Manual setting or Automatic 50% setting				
	Source	CH1, CH2, EXT, LINE				
	Sensitivity	INTERNAL (CH1, CH2)	TRIGGER	FREQUENCY	SENSITIVITY	
			DC ~ 10MHz	0.5div	5mV ~ 5V/div	2mV ~ 2V/div
		EXTERNAL	10MHz ~ 80MHz	1.5div	0.5div	
			80MHz ~ MAX. BW	2.0div	1.5div (at 10MHz ~ 40/60MHz)	
DC ~ MAX. BW	0.2Vp-p(0.5Vp-p at 150MHz ~ 250MHz)					
DISPLAY	5.7" Color / Mono LCD 320 \times 3(R.G.B) \times 240 CCFL Backlight					
MENU	Display	Type : Dots, Vectors Format : X-Y, Y-T GRID : Full, Cross, Board Contrast : Control possible				
	Save/Recall	10 Setups, 10 Waveforms This function is able to save waveform and setting state of present working environment and recall by the user. Factory setup and recall				
	Utility	Self Calibration System condition				
	Cursor	Type : time, frequency, voltage Source : CH1, CH2				
	Acquire	Peak detect : 5 μ s/div ~ 5s/div (ON/OFF) Average : 2 ~ 128 Persistence : 0.25 μ s/div ~ 0.1s/div(ON/OFF)				
	Measure	Max. 10 parameter auto measurement (pk-pk, RMS, Mean, Frequency, Rising time, Falling time, Period, Positive width, Negative width, Duty)				
HOT-KEY	Auto Set	Vertical, Horizontal & Trigger setting				
	Run/Stop	Waveform hold				
	Single	Bandwidth 20MHz				
	Hardcopy	Hardcopy through printer port or RS-232C port for thermal printer				
INTERFACE	RS-232C	Flow control : XON / XOFF, HARDWARE DATA BIT : 8, 7 STOP BIT : 1 PARITY : NONE, EVEN, ODD BAUD RATE : 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200				
		Standard Parallel Port, PCL 3 support Printer(Hardcopy)				
	USB	Ver. 1.1				
	POWER	Power supply	90V AC ~ 250V AC			
Frequency	48Hz ~ 440Hz					
Power consumption	35W					
WEIGHT	Approx 5.5kg					
SIZE	338(W) \times 167(H) \times 370(L)mm					
EMC	CE(EN 61326)					
SAFETY	CE(EN 61010-1), meet UL 3111-1					
AMBIENT CONDITON	Temperature Range for Rated Operation	+10 $^{\circ}$ C to +35 $^{\circ}$ C (+50 $^{\circ}$ F to +95 $^{\circ}$ F)				
	Max. Ambient Operating Temperature	0 $^{\circ}$ C to +40 $^{\circ}$ C (+32 $^{\circ}$ F to +104 $^{\circ}$ F)				
	Max. Storage Temperature	-10 $^{\circ}$ C to +60 $^{\circ}$ C (+14 $^{\circ}$ F to +140 $^{\circ}$ F)				
	Humidity Range for Rated Operation	45% to 85% RH				
	Max. Ambient Operating Humidity	35% to 85% RH				