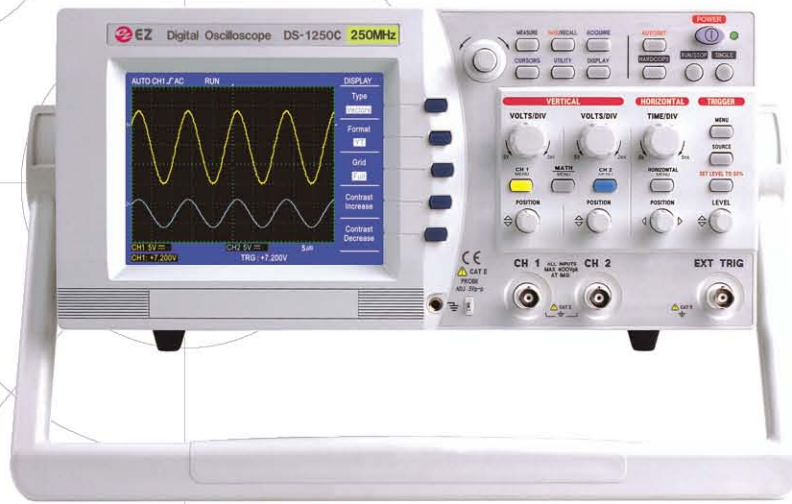


DS-1000SRS

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 P-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

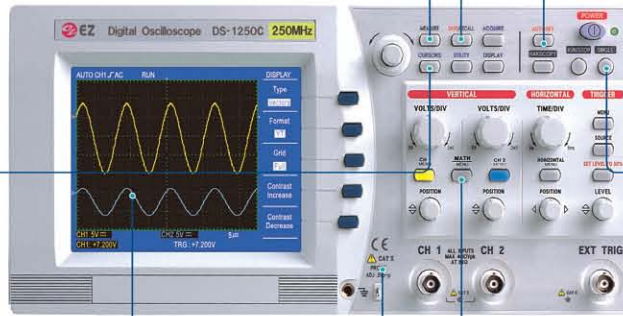
Up to 10 waveforms and 10 setup parameters save and recall are available respectively. A factory setup recall, too.

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 key 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

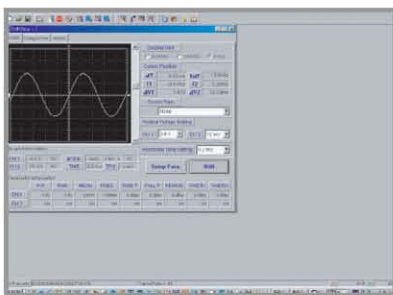
The function displays the captured signals both in the time domain and in the frequency domain and compares and measures the signals with ease simultaneously.

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.



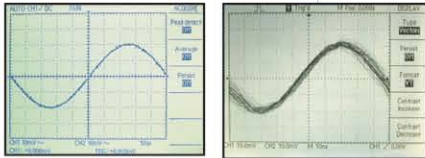
Software SoftView



Communication module

Function

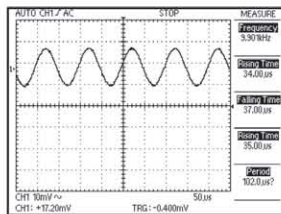
Precise vertical accuracy



Conventional Signal Processing

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.

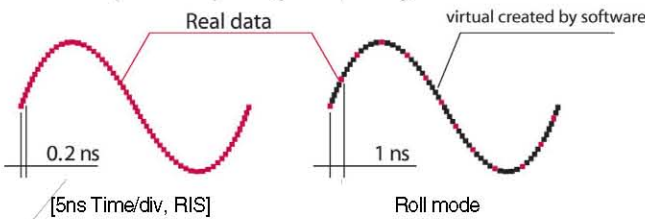
Automatic measurement of waveform parameters



The DS-1000 Series automatically measures the frequency, voltage and RMS values of a waveform. Maximum 5 parameters are set and simultaneously measured.

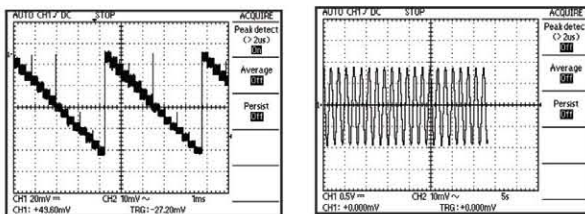
Total 10 parameters are available: PK-PK, RMS, Mean, Rising time, Falling time, Period, Positive width, Negative width, Duty, Frequency.

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



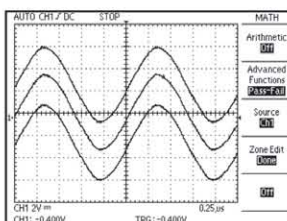
RIS sampling allows much more precise observation of repetitive waveforms. The DS-1000 Series adopts TDC (Time to Digital Converter) technique and displays all real data with equality at 10GS/s at 5ns Time/div unlike oscilloscopes using software interpolation like sinc interpolation, which interconnects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

FFT (Fast Fourier Transformation) function



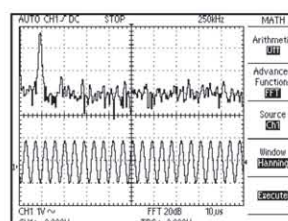
In this mode, input signals are displayed both in the time domain and in the frequency domain. The mode, therefore, is useful to compare and measure the signals at the same time.

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	D8-1080C	D8-1100C	D8-1160C	D8-1260C		
		D8-1080	D8-1100	D8-1160	D8-1260		
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(80MHz 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 \leq 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					
TRIGGER	Magnification	ZOOM IN / OUT					
	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	TRIGGER	FREQUENCY	SENSITIVITY			
				INTERNAL (CH1, CH2)	DC ~ 10MHz	0.5div	2mV ~ 2V/div
				INTERNAL (CH1, CH2)	10MHz ~ 80MHz	1.5div	0.5div
INTERNAL (CH1, CH2)				80MHz ~ MAX. BW	2.0div	1.5div	
EXTERNAL	DC ~ MAX. BW	0.2Vp-p(0.5Vp-p at 150MHz ~ 250MHz)					
DISPLAY		5.7" Color / Mono LCD 320 x 3(R.G.B) x 240 COFL 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					
	SPP	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) x 167(H) x 370(L)mm					
EMC		CE(EN 61326)					
SAFETY		CE(EN 61010-1), meet UL 3111-1					
AMBIENT CONDITION	Temperature Range for Rated Operation	+10 °C to + 35 °C (+50 °F to + 95 °F)					
	Max. Ambient Operating Temperature	0 °C to + 40 °C (+32 °F to + 104 °F)					
	Max. Storage Temperature	-10 °C to + 60 °C (+14 °F to + 140 °F)					
	Humidity Range for Rated Operation	45% to 85% RH					
	Max. Ambient Operating Humidity	35% to 85% RH					