

## DS-1080/1150/1250



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

Its 16bit high speed microprocessor adoption enables to acquire maximum 100,000points per second and quickly 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 priced products.



### General Features

- Frequency Bandwidth : DC~ 80MHz : DS-1080  
: DC~150MHz : DS-1150  
: DC~250MHz : DS-1250
- 5.7" 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  $\mu$ -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 informations
- Auto measurement and FFT Analysis
- Auto Tigger Level Setting to 50%
- Saving 10 Waveforms & 10 setup parameters
- Hold-Off(DS-1250)
- Fast Trigger On/Off(DS-1250)
- Convenient inserting interface card for RS-232C, Hardcopy and USB

Supplied by :

**Test and Measurement Instruments C.C.**

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# Specifications

MONO DIGITAL OSCILLOSCOPE

SPEC		MODEL	DS-1080	DS-1150	DS-1250	
ACQUISITION	Max. Sample rate		200MSPS for one channel only, 100MSPS/CH(real time), 25GSPPS/CH(equivalent)			
	Record length		Long Memory Max. 32KBytes/CH, Wide Waveform Zoom In / Out			
	Peak detect		Captures & displays events as narrow as 10ns GLITCH			
VERTICAL	Frequency bandwidth		DC-80MHz(40MHz at 2mV/div)	DC-150MHz(40MHz at 2mV/div)	DC-250MHz(60MHz at 2mV/div)	
	Input Channel		CH1, CH2			
	Volts/Div		2mV/div ~ 5V/div			
	Input impedance		1 Mohm // Approx. 20pF			
	Max. Input volt		400V(DC+AC Peak)(AC<1kHz)			
	Accuracy		3%			
	Input coupling		DC, AC, GND			
	Rising time		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 ~ 0.1µs/div Real time : 0.25µs/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	TRIGGER	FTEQUENCY	SENSITIVITY		
				5mV ~ 5V/div	2mV ~ 2V/div	
			INTERNAL (CH1, CH2)	DC ~ 10MHz	0.5div	0.5div
			EXTERNAL	10MHz ~ 80MHz	1.5div	1.5div
		80MHz ~ MAX. BW	2.0div	(at 10MHz ~ 40/60MHz)		
		DC ~ MAX. BW	0.2Vp-p(0.5Vp-p at 150MHz ~ 250MHz)			
DISPLAY		5.7" Mono LCD (320 × 240) CCFL Backlight				
MENU	Display		Type : Dots, Vectors Format : X-Y, Y-T Grid : Full, Cross, Board Contrast : Control possible			
	Save/Recall		10 Setups, 10Waveforms 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 : 5µs/div ~ 0.1s/div (ON/OFF) Average : 2 ~ 128 Persistence : 0.25µs/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 contrl : XON / XOFF, FARDWARE 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) × 167(H) × 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			

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