



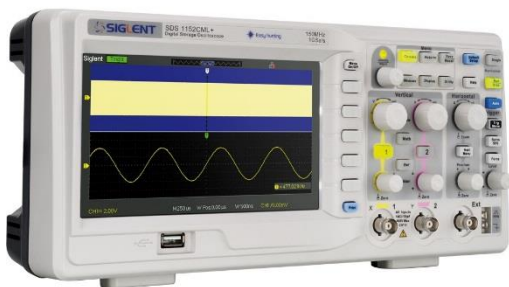
TM1050C 50MHZ DIGITAL STORAGE OSCILLOSCOPE

FUNCTIONS:

- The highest Single real-time sampling rate can be up to 1GHzsa/s; Equivalent sampling rate is up to 50GSa/s.
- Memory Depth: 2Mpts
- Trigger types: Edge, Pulse Width, Video, Slope, Alternative
- Unique Digital Filter function and Waveform recorder function
- Support Pass/Fail function.
- Thirty two parameters Auto measure function.
- Save/recall types: Setups, Waveforms, CSV file, Picture.
- Support Multilingual On-line help system
- Waveform Intensity and Grid Brightness can be adjusted.
- Support twelve types Language
- Standard Configuration Port:

USB Host: Support USB flash driver save/recall function and update firmware;

USB Device: Support PictBridge compatible printer and support PC remote control; RS232; Pass/Fail Output.





SPECIFICATIONS:

Input	
Input Coupling	AC,DC,GND
Input Impedance	1MΩ+/-2% 13pF +/-3pF
Maximum Input Voltage	400V (DC+AC PK-PK,1MΩ input impedance ×10) ,CAT I
Probe attenuator	1X, 10X
Probe attenuator	1X, 5X, 10X, 50X, 100X, 200X, 500X, 1000X
Horizontal System	
Real Time Sampling Rate	1CH: 1GHzS/s 2CH: 500MS/s
Equivalent Sampling Rate	50GSa/s
Measure Display Modes	MAIN, WINDOW, WINDOW ZOOM, Scan, X-Y
Time Base Accuracy	±100ppm measured over 1ms interval
Horizontal Scan Range	5ns/DIV – 50s/DIV (SDS1072CML) ; 2.5ns/DIV – 50s/DIV (SDS1102CML/1152CML)
	Scan: 100ms/div -50s/div (1-2.5-5 sequence)
Vertical System	
Vertical Sensitivity	2mV-10V/div at input BNC(1-2-5 order)
Channel voltage offset range	2mV–200mV:±1.6V
	206mV – 10V±40V
Vertical Resolution	8 bit
Channels	2
Bandwidth	50MHz (TM1050C)
Single Bandwidth	50MHz (TM1050C)
DC Gain Accuracy	5mv/div-10v/div:≤±3%,2mv/div: ≤±4%
DC Measurement Accuracy: All gain settings ≤100mv/div	±[3%*(reading + offset)+1%* offset +0.2div+2mV]
DC Measurement Accuracy: All gain settings >100mv/div	±[3%*(reading + offset)+1%* offset +0.2div+100mV]
Rise Time (Typical Values of BNC)	<5 ns (TM1050C))
Math operation	+, -, * , /,FFT
FFT	Window Mode: Hanning, Hamming, Blackman, Rectangular
Sampling Points	1024



Trigger System	
Trigger Types	Edge, Pulse Width, Video, Slope, Alternative
Trigger Modes	Auto, Normal, Single
Trigger Sources	Ch1-2, EXT, EXT/5, AC Line
Trigger Coupling	AC, DC, LF rej, HF rej
Trigger Level Range	CH1, CH2: ± 6 divisions from center of screen EXT: $\pm 1.2V$ EXT/5: $\pm 6V$
Trigger Level Accuracy (typical) applicable for the signal of rising and falling time $\geq 20ns$	Internal: $\pm(0.2 \text{ div} \times V/\text{div})$ (within ± 4 divisions from center of screen)
	EXT: $\pm(6\% \text{ of setting} + 40 \text{ mV})$
	EXT/5: $\pm(6\% \text{ of setting} + 200 \text{ mV})$
Edge Trigger	Edge type: Rising, Falling, Rising and Falling
Pulse Width Trigger	Trigger Modes: (> , < , =) Positive Pulse Width, (> , < , =) Negative Pulse Width
	Pulse Width Range: 20ns-10s
Video Trigger	Support signal Formats: PAL/SECAM, NTSC
	Trigger Condition: odd field, even field, all lines, line Num (> , < , =) Positive slope, (> , < , =) Negative slope
Slope Trigger	(> , < , =) Positive slope, (> , < , =) Negative slope
	Time: 20ns-10s
Alternative Trigger	CH1 trigger type: Edge, Pulse, Video, Slope
	CH2 trigger type: Edge, Pulse, Video, Slope
Control Panel Function	
Auto Set	Auto adjusting the Vertical, Horizontal system and Trigger Position
Reading resolution	6 Bytes
Accuracy	$\pm 0.01\%$
Range	DC Couple, 10HZ to MAX Bandwidth
Signal Types	Satisfying all Trigger signal (Except Pulse width trigger and Video Trigger)
Acquisition System	
Sample Types	Real time, Equivalent time
Memory Depth	2Mpts
Sample Mode	Sample, Peak Measure, Average
Averages	4, 16, 32, 64, 128, 256



Measure System	
Auto Measure	Vpp, Vmax, Vmin, Vamp, Vtop, Vbase, Vavg, Mean, Crms, Vrms, ROVShoot, FOVShoot, RPRESshoot, FPRESshoot, Rise time, Fall time, Frequency, Period, +Wid, -Wid, +Dut, -Dut, Bwid, Phase, FRR, FRF, FFR, FFF, LRR, LRF, LFR, LFF
Cursor Measure	Manual mode, Track mode and Auto mode

Generic Specification

Display System		
Display Mode	TFT 7 inches of liquid crystal display	
Resolution	480 horizontal by 234 vertical pixels	
Display Color	64K color	
Display Contrast (Typical State)	150:1	
Backlight Intensity (Typical State)	300nit	
Wave Display Range	8 x 18 div	
Wave Display Mode	Dots, Vector	
Persist	Off, 1 sec, 2 sec, 5 sec, Infinite	
Menu Display	2 sec, 5 sec, 10 sec, 20 sec, Infinite	
Skin	Succinct, modern, tradition, classics	
Screen Saver	1min, 2min, 5min, 10min, 15min, 30min, 1hour, 2hour, 5hour, off	
Waveform Interpolation	Sin(x)/x, Linear	
Color model	Normal , Invert	
Power Supply		
Input Voltage	100-240 VAC, CAT II, Auto selection	
Frequency Scope	45Hz to 440Hz	
Power	50VA Max	
Mechanical		
Dimension	length	323mm
	Width	135mm
	Height	157mm
Weight	2.5 kg	
Accessories	Operational Manual, Power Cable, USB Cable & 2pcs 70Mhz X1:X10 Oscilloscope Probes	
Environments		
Temperature	Operating: 10°C to +40°C, Not operating: -20°C to +60°C	
Humidity	Operating: 85%RH, 40°C, 24 hours, Not operating: 85%RH, 65°C, 24hours	
Height	Operating: 3000m, Not Operating: 15,266m	