DS1000E·DS1000D Series Digital Oscilloscope

16 channel Logic Analyzer
1 GSa/s maximum Real-time Sample Rate
and 1 Mpts Memory Depth

Product Dimensions: Width×Height×Depth＝303mm×154mm×133mm Weight: 2.4 kg

▶ Application Areas

- Design and debug
- Manufacturing
- Education and Training
- Service and Repair

▶ Features and Benefits

1. A true mixed signal oscilloscope with a 16 channel Logic Analyzer (DS1000D)
2. 1 GSa/s maximum Real-time Sample Rate and 1 Mpts Memory Depth
3. Bandwidth options: 50MHz and 100MHz
4. Extensive set of trigger modes including: Edge, Video, Pulse Width, Slope, Alternate
5. 64 k TFT Color LCD, bright and vivid waveform display
6. Direct print to PictBridge compatible printers via USB Device interface
7. Compact design to save your desktop space

Model	DS1102E	DS1052E	DS1102D	DS1052D
Bandwidth	100 MHz	50 MHz	100 MHz	50 MHz
Logic Analyzer	×		√	

▶ Specifications

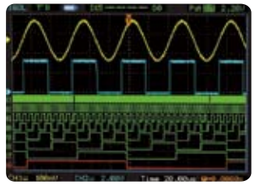
Model	DS1102E	DS1052E
	DS1102D	DS1052D
Bandwidth	100 MHz	50 MHz
Channels	2 Channels + External Trigger	
Real-time Sample Rate	1 GSa/s (Single Channel), 500 MSa/s (Dual Channels)	
Equivalent-time Sample Rate	25 GSa/s	10 GSa/s
Rise Time	3.5 ns	7 ns

Memory Depth	Channel Mode	Sample Rate	Normal Memory	Long Memory
	Single Channel	1GSa/s	16 kpts	N.A.
	Single Channel	500MSa/s or lower	16 kpts	1Mpts
	Dual Channels	500MSa/s or lower	8 kpts	512 kpts
Timebase Range	2 ns/div ~ 50s/div		5 ns/div ~ 50s/div	
Trigger Modes	Edge, Video, Pulse Width, Slope, Alternate			
Vertical Resolution	8 bits			
Vertical Sensitivity	2 mV/div ~ 10V/div			
Maximum Input Voltage	All inputs 1MΩ II 15pF 300V RMS CAT I			
Input Coupling	DC, AC, GND			
Roll Range	500ms/div ~ 50s/div			
Cursor Measurements	Manual, Track and Auto Measure modes			
Math	+, −, ×, FFT			
Internal Stroge	10 Waveforms and 10 Setups			
USB Storage	BMP, CSV, Waveforms and Setups			
Connectivity	USB Device, USB Host, RS-232, P/F Out			
Display	5.6″ TFT (64 k, Color LCD), 320×234 resolution			
Power Supply	AC: 100 ~ 240 VACRMS, 45 ~ 440 Hz, CAT II, 50 VA Max			
MSO Logic Analyzer	DS1102D		DS1052D	
Channels	16 logic Channels			
Sample Rate	200MSa/s (each channel)			
Record Length	512 kpts (each channel)			
Trigger Modes	Pattern, Duration			
Threshold Selections	TTL=1.4V, CMOS=2.5V, ECL=-1.3V, USER=-8V to + 8V			

▶ DS1000D Logic Analyzer Module

Mixed Signal Oscilloscope (MSO) with 16 channels Logic Analyzer (LA).LA is divided into two groups: D7-D0, D15-D8. Each works separately.

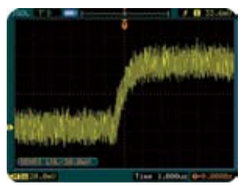
Logic Analyzer Module



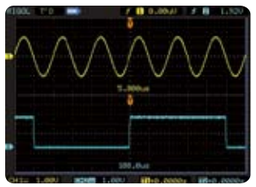
Pattern Trigger
The trigger condition is a combination of the level of the signal and the edge

Duration Trigger
A combination of Pattern Trigger and Pulse Width Trigger capabilities make isolation of events easy

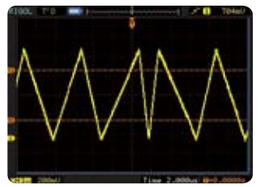
▶ Advanced trigger modes



Adjustable Trigger Sensitivity
The ability to filter noise from the signal avoids false triggers



Alternate Trigger
Provides a true dual timebase display



Slope Trigger
Triggers on the signals rise time or fall time is user defined