USB-DSO 1 USB-DSO2

8-bit .1GS/s 2-ch Digital Storage Oscilloscope

16-bit ,1GS/s 2-ch Digital Storage Oscilloscope



Features

- Up to 1GS/s maximum sample rate
- 200 MHz bandwidth
- Up to 128 MS/ch of waveform memory
- PC based user interface (USB 2.0)
- Stackable up to 12 channels
- Built-in two function generators
- Support Trigger and FFT function
- Small size for portable usage (135 x 80 x 26 mm³)
- 8 ~ 16 bits resolution for various applications (USB-DSO2 only)

40 ps

±10 ppm

Introduction

USB-DSO are USB digital storage oscilloscopes which provide you a flexible and convenient way to measure signal. It provides 200MHz bandwidth and up to 1GS/s sample rate. It also equips up to 128MS/ch waveform memory for high speed data acquisition. You can acquire and analyze data in your laptop or PC by using friendly software.

Specifications

Acquistion Mode Sample, Average, Envelope, Peak detect, High resolution Sampling USB-DS01: 1 GS/s @ 1 Ch; 500 MS/s @ 2 Ch USB-DS02: 8 bits. 1 GS/s @ 1 Ch: 500 MS/s @ 2 Ch 12 bits. 500 MS/s @ 1 Ch: 250 MS/s @ 2 Ch 14/15 bits, 100 MS/s @ 2 Ch • 16 bits, 100 MS/s @ 1 Ch Record length USB-DS01 8 bits, 128MS/ch @1 Ch; 64MS/ch @2 Ch USB-DS02: 8 bits, 128MS/ch @1 Ch; 64MS/ch @2 Ch 12/14/15/16 bits, 32MS/ch Input Input channels 2 (Ch1, Ch2) Input coupling AC/DC Input impedance 1 MΩ II 18 pF **Overvoltage protection** ± 100 V (DC+AC peak) Ch-Ch crosstalk ≧100:1 Ch-Ch skew 100 ps between two channels with the same scale & coupling settings • Vertical Bandwidth 200 MHz @ 1-channel; 100 MHz @ 2-channels 1.75 ns @ 200 MHz; 3.5 ns @ 100 MHz Rise Time USB-DS01: 8 bits Resolution USB-DS02: 8, 12 ,14, 15,16 bits Input Sensitivity 2 mV/div to 10 V/div (Full Scale: ±4 div/screen, ±1 div beyond screen) Position range ±4 divisions Offset range ±150 V @ 2, 5, 10 V/div; ±1.5 V @ 0.2, 0.5, 1 V/div; ±1.5 V @ 2, 5, 10, 20, 50, 100 mV/div DC accuracy ±3% of full-scale Bandwidth limit 20 MHz, 100 MHz or Full

- Horizontal
- Time scale
- Time resolution
- Time accuracy
- Delay range
- Trigger
- Trigger mode
- Source
- Couplina
- Trigger range
- Vertical sensitivity
- Trigger type
- Basic trigger

I/O port

- Trig-In
- Trigger pulse approval
- Trig-Out

Function Generator

- **Output channels**
- **Output impedance**
- Frequency
- Amplitude FG mode
- Max. channels expand 12 ch (6x DSO, 1 Master & 5 Slaves)
 - **Trigger source** All channels available
- Skew between devices Skew between Master & Slave ±1ns @ 1-channel

Ordering Information

- USB-DS01-AE USB-DS02-AE
- 8-bit ,1GS/s 2-ch Digital Storage Oscilloscope 16-bit ,1GS/s 2-ch Digital Storage Oscilloscope

Skew between Master & Slave ±2ns @ 2-channel

- Package includes DSO device, USB 2.0 Cable, Stack cable and two 250MHz Probe.

TTL 3.3 V level (Rising/Falling) > 8 ns TTL 3.3 V

2 ns/div to 100 s/div (10 div/screen)

Pre-trigger: 0 to 100% of 1 screen;

Auto, Normal, Single, Untriggered-Roll (Max S/R up to

DC, LF reject (50kHz), HF reject (50kHz), Noise reject

1 div or 5 mV @ <10 mV/div; 0.6 div @ ≧10 mV/div

250KS/s,maximum speed is PC-dependent)

Post-trigger up to 50 sec.

Ch1, Ch2, Ext. (TTL only)

±4 div from window center

Edge, Video/TV, Pulse Width

Rising, Falling, Alternate, Either

- 2 (Gen.1, Gen.2)
 - 600Ω
 - DC to 1MHz
 - 0 V to 2.5 V (to 1 MΩ load) ±50mV Sine, Square, Pulse, Triangle, Ramp, DC
- Stack

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Advantech: USB-DSO2-AE