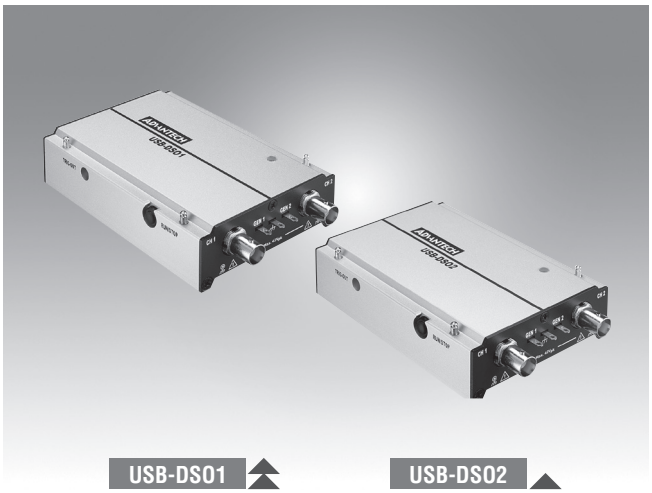
USB-DSO1
USB-DSO2

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 mm^3)
- 8 ~ 16 bits resolution for various applications (USB-DSO2 only)

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-DSO1:
  1 GS/s @ 1 Ch; 500 MS/s @ 2 Ch
  USB-DSO2:
  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-DSO1:
  8 bits, 128MS/ch @1 Ch; 64MS/ch @2 Ch
  USB-DSO2:
  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 ll 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
- **Rise Time** 1.75 ns @ 200 MHz; 3.5 ns @ 100 MHz
- **Resolution** USB-DSO1: 8 bits
  USB-DSO2: 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** 2 ns/div to 100 s/div (10 div/screen)
- **Time resolution** 40 ps
- **Time accuracy** ±10 ppm
- **Delay range** Pre-trigger: 0 to 100% of 1 screen;
  Post-trigger up to 50 sec.

Trigger

- **Trigger mode** Auto, Normal, Single,Untriggered-Roll (Max S/R up to 250KS/s,maximum speed is PC-dependent)
- **Source** Ch1, Ch2, Ext. (TTL only)
- **Coupling** DC, LF reject (50kHz), HF reject (50kHz), Noise reject
- **Trigger range** ±4 div from window center
- **Vertical sensitivity** 1 div or 5 mV @ <10 mV/div; 0.6 div @ ≧10 mV/div
- **Trigger type** Edge, Video/TV, Pulse Width
- **Basic trigger** Rising, Falling, Alternate, Either

I/O port

- **Trig-In** TTL 3.3 V level (Rising/Falling)
- **Trigger pulse approval** > 8 ns
- **Trig-Out** TTL 3.3 V

Function Generator

- **Output channels** 2 (Gen.1, Gen.2)
- **Output impedance** 600Ω
- **Frequency** DC to 1MHz
- **Amplitude** 0 V to 2.5 V (to 1 MΩ load) ±50mV
- **FG mode** Sine, Square, Pulse, Triangle, Ramp, DC

Stack

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

Ordering Information

- **USB-DSO1-AE** 8-bit ,1GS/s 2-ch Digital Storage Oscilloscope
- **USB-DSO2-AE** 16-bit ,1GS/s 2-ch Digital Storage Oscilloscope

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

Last updated: 22-Aug-2017