ISDS2062A(B) **User Guide**

InstruStar Electronic Technology

2015-8-15

contents

PC SYSTEM REQUIREMENTS

- Windows XP，Win7，Win8，Win10

- Pentium or higer processor

- USB2.0 High speed port.

- 512MB RAM

- 1GB hard disk space

1.Introduction

ISDS2062A/ISDS2062B dual-channel digital oscilloscope, with "low-cost, high-performance" as the design goals. well-designed bandwidth of 12Bit, 20M, 60M sampling rate, 2 channels, alternating support X-T and X-Y alternating pattern of two-channel virtual oscilloscope, spectrum analyzer. Meanwhile, ISDS2062B has DDS function. DDS support 5 kinds of waveform output, Sine wave can output up to 20M. The device communicate with the PC via high speed USB2.0.

	Digital oscilloscop	Spectrum analyzers	DDS
ISDS2062A	√	√	
ISDS2062B	√	√	√

2.Feature Description

Digital oscilloscope	
Channels	2
Impedance	1MΩ 25pF
Coupling	AC/DC
Vertical resolution	12Bit
Gain range	-32V ~ 32V（probe X1） -320V ~ 320V（probe X10）
Vertical accuracy	±3%
Timebase range	1ns-10s
Input Protection	Diode，50Vpk
Autoset	Yes(10Hz to 20MHz)
Trigger Mode	Auto、Normal and Signal
Trigger Type	No、Edge、Pulse
Trigger level	Yes
Trigger Source	CH1, CH2
Trigger Sense	0.1div-1.0div
Buffer Size	256KB/CH
Bandwidth	20MHz
Max sample	60MS/s
Vertical mode	CH1, CH2, ADD, SUB, MUL
Display Mode	X-T 和 X-Y
measurements	Yes
Wave save	Osc(Private)、Excel and Bmp

Spectrum analyzers	
Channels	2
Bandwidth	20MHz
Algorithm	FFT(18 windows)、Correlation
FFT points	8-1048576/CHN
FFT measure	Harmonic(1-7)、SNR、SINAD、ENOB、THD、SFDR
Filter processing	FIR filter supports arbitrary range of frequency sampling method , and Rectangle, bartlett, triangular, cosine, hanning, bartlett_hanning, hamming, blackman, blackman_Harris, tukey, Nuttall, FlatTop, Bohman, Parzen, Lanczos, kaiser, gaussand dolph_chebyshev, window method design. IIR filter support "Butterworth", "Chebyshev I", "Chebyshev II", "Elliptic" type of filter design

DDS(Only ISDS220B)	
Wave	Sine, Square(Duty circle variable),Triangle,Up Sawtooth,Down Sawtooth
Amplitude	≥9Vp-p(no load)
Impedance	200Ω±10%
Offset	±2.5V
Frequency range	0.1Hz ～ 20MHz(Sine), 0.1Hz ～ 2MHz(Others)
Frequency resolution	0.1Hz
Frequency steadiness	$\pm1\times10^{-3}$
Frequency precision	$\pm5\times10^{-3}$
Triangular wave linearity	≥98% (1Hz~10kHz)
Sine wave distortion	≤0.8% (1kHz)
Square wave rising/falling time	≤100ns
Square wave duty circle	1%~99%
SWEEP	
Sweep range	Fs 到 Fe
Sweep time range	0.1 ~10 s
Amplitude	0.5Vp-p ～ 10Vp-p

Note: The oscilloscope factory calibration, if you are not satisfied with the measurements, canmanual calibration, the specific reference oscilloscope instructions.

3.Software Installation

Please refer to the "Software and Driver Installation.pdf".

4.Oscilloscope/Spectrum analyzer/DDS

Please refer to the "Multi VirAnalyzer User Guide.pdf", "Digital storage oscilloscope (Professional Version).pdf" and "Digital storage oscilloscope (Simplified Version).pdf".