

Features:



- Hand-held portable, 153(L) x 93(W) x 23(H) mm.
- Provide GPIO interface.
- Open source hardware interface to support expansion modules.
- Provide software interface protocol for secondary development.
- USB 2.0 interface, USB powered with no additional power required.
- Free Windows PC software for both oscilloscope and data logger.
- Available oscilloscope software on Android Mobile Phone.
- Large screen display and convenience of operating PC software.
- Support Serial bus decoding.

APPLICATIONS:

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- ✓ *General-purpose and precision testing.*
 - ✓ *Embedded in teaching equipment or industrial testing equipment for use.*
 - ✓ *Powersupply ripple and noise detection.*
 - ✓ *Multi-sensor systems and Serial bus decoding.*
 - ✓ *Secondary development of analog data acquisition and DIO control.*
 - ✓ *Current/Voltage recording and analysis System for Solar Power Supply and Lighting System.*
 - ✓ *Diagnosis device for filed engineers.*
 - ✓ *Basic equipment for DIY makers to develop their own modules.*
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SPECIFICATIONS:

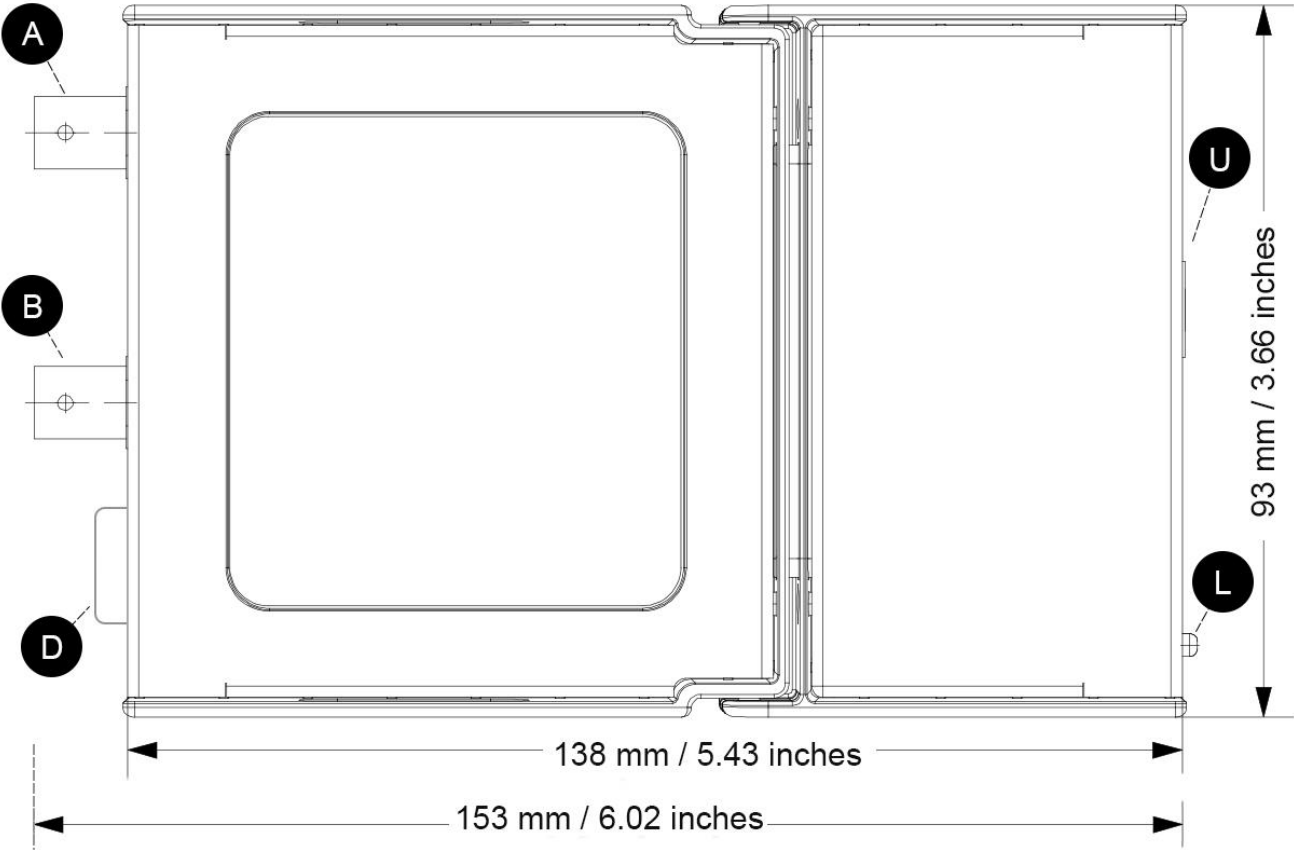
● Connector type :	2 channels with BNC sockets, 20 mm spacing.			
● Vertical resolution:	8 Bit.			
● Maximum sampling rate (S/s):	OSC48x	OSC80x	OSCA02	OSC2002
	50M	80M	100M	1G
● Bandwidth (-3 dB):	20M Hz	25M Hz	35M Hz	50M Hz
● Input coupling:	AC/DC.			
● Input characteristics:	1MΩ 25pF.			
● PC OS requirements:	Windows XP, Win 7, Win 8.1, Win10 (32 bit and 64 bit).			
● Overvoltage protection:	±60.0v (x1), ±600.0v (x10). (DC + AC peak)			
● Triggering type:	Rising/falling edge according to trigger level.			
● Triggering mode:	None, auto, normal, single.			
● pre-trigger capture:	50% of capture size.			
● Automatic measurements:	Maximum, minimum, average, RMS, frequency, period, positive pulse width, negative pulse width, duty cycle, rise time, peak-to-peak value.			
● Samples Interpolation:	Linear or sin(x)/x.			
● FFT:	1024 points.			
● FFT window function:	Rectangle, Hanning, Hamming, Blackman.			
● Math:	A+B, A-B, AxB, X-Y.			
● Acquisition Modes:	High Resolution mode / Peakdetect mode.			
● Waveform recording and playback:	File format :	*.oscxxx.		
	Record depth:	50 ~ 450 frames.		
	File size:	6 MB ~ 20GB.		
● Data logger Sampling Interval:	1 second to 1 hour.			
● Data logger Record Duration:	1 minute ~ 72 hours.			
● Temperature range:	Operating: 0 °C to 40 °C (20 °C to 30 °C for stated accuracy). Storage: -20 °C to +60 °C.			
● Reference Output:	1K Hz, 1.5 V square wave output with 50% duty cycle.			
● Size:	153(L) x 93(W) x 23(H) mm.			
● Languages (full support):	English, Chinese (simplified).			
● Compliance:	CE, FCC.			
	OSC48x		OSC80x	OSCA02 / OSC2002
● Net weight:	198 g.		202 g.	210 g.
● Input sensitivity (10 vertical divisions):	20 mV/div to 2 V/div.		20 mV/div to 2 V/div.	50 mV/div to 2 V/div.
● Input ranges(probe x1):	±100 mV to ±5 V full scale, in 7 ranges.		±100 mV to ±5 V full scale, in 7 ranges.	±250 mV to ±5 V full scale, in 6 ranges.
● Timebase selection (10 horizontal divisions):	50 ns/div ~ 2 s/div, in 19 ranges.		50 ns/div ~ 2 s/div, in 19 ranges.	5 ns/div ~ 2 s/div, in 21 ranges.
● Typical	20 mv/div	2 mv	3 mv	/



noise (peak to peak voltage):	50 mv/div	3.4 mv	4.8 mv		5.8 mv		
	100 mv/div	6.4 mv	7.2 mv		8 mv		
	200 mv/div	21 mv	19.4 mv		22 mv		
	500 mv/div	32 mv	34.8 mv		38.8 mv		
	1 v/div	101 mv	87.8 mv		88.2 mv		
● GPIO:		4 I/O		3 I/O		3 I/O	
● Memory depth (byte /ch):		512	≤1 us/div	64k	≤100 ms/div	64k	≤100 ms/div
		1k	4 us/div				
		2k	20 us/div				
		32k	0.2 ms ~ 5 ms /div				
		64k	10 ms /div				
		256k	100 ms /div	208k	200 ms/div	258k	200 ms/div
		512k	200 ms /div	512k	500 ms/div	645k	500 ms/div
		1M	0.5 s/div	1M	1 s/div	1M	1 s/div
		2M	1 s/div	2M	2 s/div	2M	2 s/div
		5M	2 s/div				
● Trigger type:		Software		Hardware		Hardware	
● Trigger source:		Channel A/B		Channel A		Channel A	
● Power consumption:		5 v (238~253) mA		5 v (324~355) mA		5 v (248~279) mA	
● Protocols decoding:		/		UART/RS-232, I²C		UART/RS-232, I²C	
		OSC48x		OSC80x		OSCA02 / OSC2002	

AT A GLANCE


Model:	OSC48x	OSC80x	OSCA02	OSC2002
Input channels:	2	2	2	2
Maximum sampling rate (S/s):	50M	80M	100M	1G
Bandwidth (−3 dB):	20M Hz	25M Hz	35M Hz	50M Hz
FFT:	✓	✓	✓	✓
Data logger:	✓	✓	✓	✓
I/O extension:	✓	✓	✓	✓
Serial bus decoding:	✗	✓	✓	✓
Hardware trigger:	✗	✓	✓	✓
Ext trigger module support::	✗	✗	✓	✓
Signal generator module support:	✓	✗	✗	✗
Logic analyzer module support:	✗	✓	✓	✓

INTERFACES:



Description:	
A	Input channel A.
B	Input channel B.
L	Power LED (red), Status LED (green).
U	USB 2.0 interface, Type B female.
DB15 interface for expansion modules.	
D	OSC48x
	OSC80x/OSCA02/OSC2002
<div><p>6: 1.5 VPP 1K HZ</p><p>1: NC — 11: NC</p><p>2: IO1 — 12: 3.3V</p><p>8: DGND — 13: -5V</p><p>3: IO2 — 14: 5V</p><p>9: IO4 — 15: AGND</p><p>4: IO3</p><p>5: Ain</p></div> <div><p>6: 1.5 VPP 1K HZ</p><p>1: NC — 11: NC</p><p>2: IO1 — 12: 3.3V</p><p>8: DGND — 13: -5V</p><p>3: IO2 — 14: 5V</p><p>4: IO3</p><p>5: Ain — 15: AGND</p></div>	

Accessories:

type	quantity	model	details	
Passive voltage probe, 60 MHz x1/x10	2	P2060	10x: 60M Hz,10M Ω ,600 V CAT II	
			1x: 6M Hz,1M Ω ,300 V CAT II	
USB cable	1	U2100	USB 2.0 Printer Cable. Type A Male to B Male.	

Optional expansion modules:

type	model	interface	Host device	details
Signal generator module	S01	DB15	OSC482	1 channel, Sine wave, Triangle wave, Square wave.1 Hz ~ 13M Hz(Sine wave) output frequency range. 48M sampling rate.
Logic analyzer module	L01	DB15	OSC802/OSCA02/OSC2002	4 channels, TTL level, consistent with the performance of the host device.

