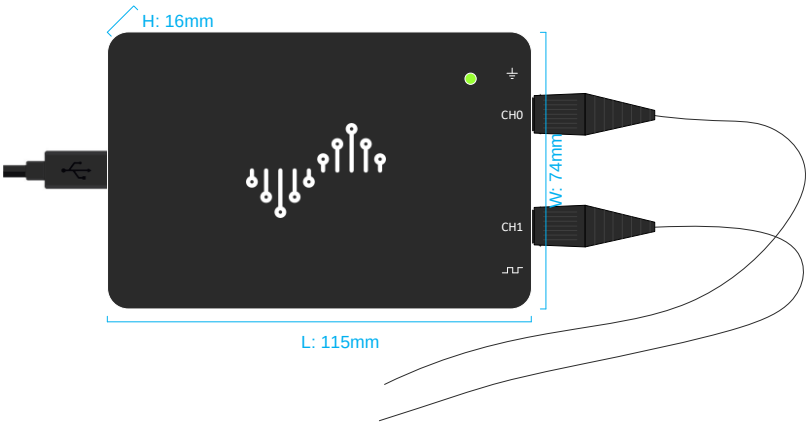
DSCope U3P100

USB-based Digital Oscilloscope

Key Features

- 2 analog channels
- USB 3.0 interface
- 100MHz bandwidth
- Up to 1GSa/s sample rate
- Up to 2Gbits hardware memory
- Ultra-portable size
- Unibody aluminum case
- 3-year warranty



Connectivity

- Main Type-C USB 3.0 interface
- Auxiliary Type-C USB interface
- BNC connectors (Standard Probe Interface)
- Extension interface (Pogo Pin Connector)

Power Source

- Power source voltage: $5V_{DC} \pm 5\%$
- Power consumption: 4W maximum

Input output ports

	Direction	Descriptions	Protected Voltage Range
Main USB 3.0 data port	InOut	Connect to host computer	4.75v ~ 5.25v
Auxiliary USB power port	Input	Auxiliary power	4.5v ~ 5.5v
BNC connectors	Input	Connect to probes	-100v ~ +100v (DC+AC)
Extension interface	InOut	Extension probes and module	0-3.3v
Probe compensator	Output	3v // ~1KHz square wave	--

Designed to make your work enjoyable

DSCope U3P100 is a USB-based digital oscilloscope, which has a portable size (115x74x16mm), but powerful performance (up to 1GSa/s sample rate, USB 3.0 interface). With the easy-to-use and cross platform software, DSView, you can use your favorite computer to debug and analysis your circuits, observe the analog wave and its frequency spectrum at anywhere and anytime.

Technical Specifications

Vertical system

Analog Bandwidth:	100MHz
Input coupling:	DC or AC
Input impedance:	1MΩ // ~16pF
Input sensitivity range:	10mV/Div to 2V/Div
Vertical resolution:	8bits
Maximum input voltage:	peaks ≤ ±100V
DC gain accuracy:	±6%
Vertical position range:	±5 divisions
Vertical offset ranges:	Volts/Div setting Offset rang 10mV/Div ~ 2V/Div ±100mV ~ ±20V/Div
Common mode rejection ratio(CMRR):	--
Channel-to-channel isolation:	--

Horizontal system

Maximum sample rate (single channel)	1GSa/s
Maximum sample rate (dual channel)	500MSa/s
Time base range:	2ns/Div to 10s/Div
Maximum duration of time captured at highest sample rate (all channels):	2ms (real-time capture) 200ms (single capture)
Record Length (real-time capture):	1M (dual channel) 2M (single channel)
Record Length (single capture):	128M (dual channel) 256M (single channel)

Trigger system

Trigger mode:	Auto Normal (ch0, ch1, ch0 & ch1, ch0 || ch1)
Trigger position range:	1% ~ 99% of record length
Trigger holdoff range:	1 us ~ 10 s
Trigger types:	Edge (rising or falling)
Sensitivity:	0 ~ 0.625 vertical division
Trigger level ranges:	±4.4 vertical division from center screen

Waveform measurements

Cursors:	Horizontal Width/Frequency/Period/Duty Vertical Amplitude
Automated measurements:	Frequency / Period / +Duty /- Duty / +Count Rise / Fall / +Width / -Width / BrstW Amplitude / High / Low / RMS / Mean Pk-Pk / Max / Min / +Over / -OVer

Waveform math

FFT:	Spectrum magnitude Length: 1K ~ 16K Vertical scale: Linear RMS or DBV RMS Window: Rectangle, Hann, Hamming, Blackman, Flat_top
Math:	Add / Subtract / Multiply / Divide

Waveform display

Time domain:	Real-time view Single capture view
X-Y mode:	Lissajous Figure

System Requirements

Windows XP, Vista, Win7, Win8 & Win10
Mac OS X 10.12 or above
Linux: Ubuntu, Fedora, Arch, etc.
USB 3.0 Host port

Safety & Caution

- *If you are using a mains powered (grounded) host computer, the ground terminals of DSCope is also connected to the real ground, you must avoid to connect any ground terminals to HOT DUTs.*
- *DSCope has the overcurrent protection, but we recommend that you should try to avoid any short circuit event. After all the ability of upstream USB port is an uncertain factor.*

Revision History

The following table shows the revision history for this document.

Date(DD/MM/YY)	*Version*	*Revision*
18/02/20	*v1.0*	*Initial release (based on DSView v1.10)*