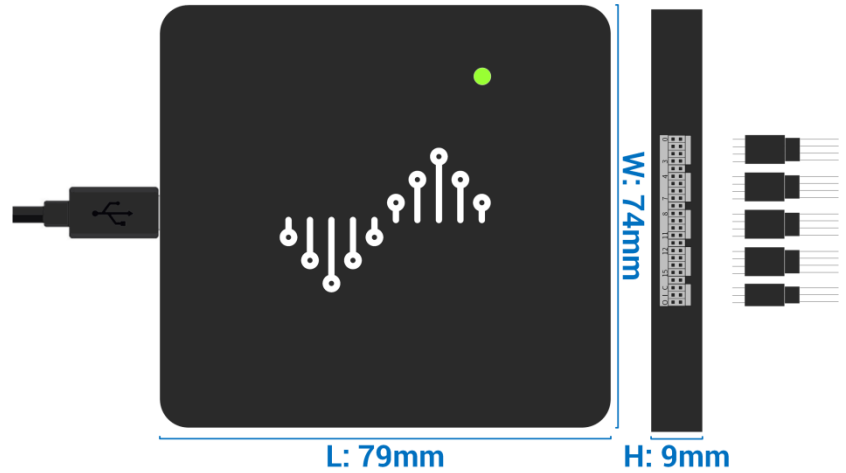# DSLogic Plus

USB-based Logic Analyzer

Key Features

- 16 digital channels
- Up to 400MHz sample rate
- Up to 256Mbits hardware memory
- Up to 16G sample depth (stream mode)
- Adjustable Threshold (0.1V Step)
- Shielded fly wires
- Unibody aluminum case
- 1-year warranty

W: 74mm

L: 79mm   **H: 9mm**

Connectivity

- USB Type-C interface (USB 2.0 device port)
- 1.27mm dupont female connector (Host device)
- 2.54mm dupont female connector (Fly wires)

Power Source

- Power source voltage: $5V_{DC}\pm5\%$
- Power consumption: 2 W maximum

Input output ports

	Direction	Descriptions	Protected Voltage Range
USB 2.0 port	InOut	Connect to host computer	4.75v ~ 5.25v
CH0 ~ CH15	Input	Connect to under test signals	-30v ~ 30v (with fly wires)
CK	Input	Clock input at state sample mode	0v ~ 3.3v (Max 50MHz)
TI	Input	Reserved	0v ~ 3.3v
TO	Output	External trigger signal output	--

Designed to make your work enjoyable

DSLogic Plus is an USB-based logic analyzer, which has a portable size (79x74x9mm), but powerful performance (up to 400MHz sample rate). With the easy-to-use and cross platform software, DSView, you can use your favorite computer to debug and analysis your circuits, observe the digital wave and decoder various protocols at anywhere and anytime.

Technical Specifications

Input Voltage and Thresholds

Safe voltage range: -30v ~ 30v (with fly wires)
Threshold voltage: 0v ~ 5v (0.1v step)
Work with most of logic voltage level (such as: 5v, 3.3v, 2.5v, 1.8v, 1.5v, 1.2v, 1.0v, etc.)
ESD protected

Input Impedance

250KΩ // ~13pF

Max Sample Rates

Buffer mode		Stream mode	
4 channels:	400MHz	--	
8 channels:	200MHz	--	
16 channels:	100MHz	3 channels:	100MHz
--		6 channels:	50MHz
--		12 channels:	25MHz
--		16 channels:	20MHz

Max Sample Depth

Buffer mode (without RLE compression): 256M / num. of channels
Buffer mode (with RLE compression): 16G / num. of channels
Stream mode: 16G

Error/Accuracy

Minimum acquisition pulse: 5ns
Acquisition Accuracy: $\pm$sample interval (for example: $\pm$10ns@100M sample rate, $\pm$1us@1M sample rate)

Noise Immunity

Each channel provides independent shielding ground.

System Requirements

Windows XP, Vista, Win7, Win8 & Win10
Mac OS X 10.12 or above
Linux: recent Ubuntu, Fedora, Arch, etc.
USB 2.0 Host port

Safety & Caution

- *If you are using a mains powered (grounded) host computer, the ground terminals of DSLogic are also connected to the real ground, you must avoid to connect any ground terminals to HOT DUTs.*
- *DSLogic 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
20/06/20	*v1.2*	*Add CK max frequency*
18/02/20	*v1.1*	*Minor fix (based on DSView v1.10)*
17/08/17	*v1.0*	*Initial release (based on DSView v0.98)*