Model No : **ZS-1100-A**
Model Name : **IOT Source Meter**

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The ZS1100A is a USB based programmable precision voltage source meter made for IOT applications. It can measure the energy consumption of IOT devices accurately in order to estimate the battery life. It can plot the current vs time with accuracy and fast response time.

Technical Specifications

Parameter	Specification	Notes
Output voltage range	0 to 6V	Programmable in 10mV steps
Output voltage accuracy	Error of 10mV max	Measured with 100mA load
Current Measurement range	-0.5A to 1.5A (Linear Range)	
Current measurement accuracy	1% of measured value +/- 0.2uA	After one time self calibration.
Current measurement resolution	< 0.1uA	
Max Output current	1A constant current	Vout = 5.0V
	3A with 10% Duty	Measured with 100ms pulse for every 1 second.
Load regulation	<1%	0 to 1.5A
Measurement bandwidth	300KHz	3dB bandwidth, Single pole RC filter.
Step Response	2µS	10% to 90% of full range.
Current Sampling rate	1MHz	
Sampling jitter	10ps	RMS jitter
Voltage sampling rate	Once in every 20ms	Software programmable
Digital Capture	6 bits at 1Msps	
Programmable Output Resistance	0 to 5 Ohms	In steps of 20mOhm
Programmable Current limit	10mA to 1.5A	In steps of 10mA
Maximum capture length	Tested up to 24 hrs	Limited only by the free space on the HDD.
Error Rate	< 1E-12	Less than 1 error in 10^{12} samples.

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		Or less than one sample error in 24 hours.
Export format	XML, Sigrok	
Operating environment	15C-40C < 90% RH	
Power Consumption	< 1W	USB power < 1W for measurement unit. Load current is supplied by 12-15V DC Adaptor
Standard Conformance	CE, FCC, RoHS	

Note : Error rate does not include errors caused by external interference.
Note : Technical specifications are preliminary and subject to change based on final test data.

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