

Model No : **ZS-2102-A**
Model Name : **IOT Power Profiler**

Technical Specification

Parameter	Specification	Notes
Current Measurement range	-1A to 1A (Linear Range)	1.2A max measured value with compression.
Current measurement accuracy	1% +/- 1uA	After self calibration.
Current measurement resolution	< 0.1uA	
Max Current Input	3A with 10% Duty	Measured with 100ms pulse for every 1 second.
Input 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
Input impedance differential	0.1 Ohm	Measured between BATT and LOAD terminal.
Input voltage range	0 to 6V	9V absolute maximum measured w.r.t. GND
Voltage measurement accuracy	1 %	Voltage is measured at the BATT terminal.
Voltage sampling rate	Once in every 20ms	Hardware capable of 10ms sampling.
Digital Capture	8 bits at 1Msps	
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. Or less than one sample error in 24 hours.
Export format	XML, Sigrok	
Operating environment	15C-40C < 90% RH	
Power Consumption	< 1W	USB 5V powered
Standard Conformance	CE, FCC, RoHS	

Note : Error rate does not include errors caused by external interference.