

ACCELERATION MEASUREMENT **AccStick**

Shock & Vibration Data Logger

AccStick

This extremely small device with built-in 3D accelerometer, flash-memory and rechargeable battery has been released. 3D acceleration waveforms are captured via high speed sampling, at 1600Hz max. Measured data can be described and converted to .csv file via PC software.

Features of hardware

Wide measuring range

2 accelerometers built in to a single unit enable measurements of the accurate behavior of 3D acceleration from 2G to 400G.

High speed sampling

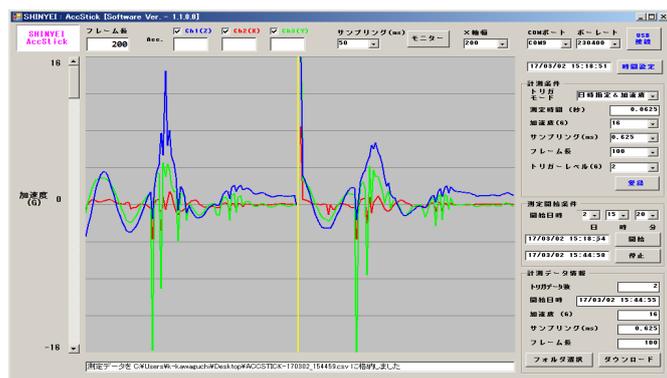
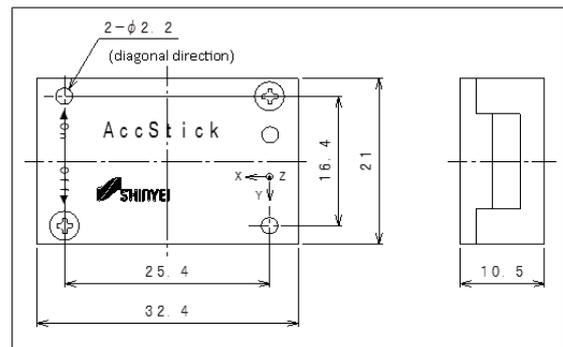
Acceleration waveform in detail is captured by Max 1600Hz sampling rate.

Small package

The extremely small unit, 32.4 x 21.0 x 10.5mm, will enable you to measure 3D acceleration in any location.

Calibration Service (optional)

To measure 3D acceleration with high accuracy, we provide you optional calibration service. Test report & traceability chart will be attached with your device.



Operation page

Features of software

Original dedicated software provides easy connectivity to PC for parameter settings. Data from data logger is easily transferred to PC and can be conveniently converted to .CSV format. Converted data could be easily studied and analyzed in .CSV format via Microsoft Excel or equivalent.

< Features >

Configuring measuring conditions, Starting or stopping measuring, Downloading measured data, Converting as csv file, Viewing captured data, Monitoring data real time, etc.

⇒ Software is available for free download via website below.

http://www.shinyei-tm.com/product_AccStick.html



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Application

- Various automotive applications
- Reliability testing for electrical products
- Motion monitoring for robots and androids
- Logistical distribution such as during loading and unloading, and distribution
- Sporting goods development
- Production equipment monitoring and maintenance



Recommended setting conditions for each application

Vibration

Shock

Setting items \ Measuring subject	Maintenance for mechanical equipment	Vibration test	Ride quality evaluation on the vehicles	Measuring vibration of vehicular parts	Motion monitoring of human body	Drop test for packaging	Measuring of rotational object
Trigger mode	Acceleration Timer & Acceleration	Acceleration Timer & Acceleration	Timer	Timer	Timer	Timer	Timer
Measuring time (s)	1.25	1.25	312.5	312.5	625	125	250
Acceleration range (G)	8	16	2	16	16	100	16 ~
Sampling rate (ms)	0.625	0.625	0.625	0.625	1.25	1.25	1.25
Flame length	2,000	2,000	500,000	500,000	500,000	100,000	200,000
Trigger level	2	2	—	—	—	—	—

Specification

Product	Shock & Vibration data logger AccStick	
model	A01-16400	
Accelerometer	Vibration sensor	± 16G with 3axis MEMS
	Shock sensor	± 400G with 3axis MEMS
Configuration range (G)	Vibration sensor	2 / 4 / 6 / 8 / 16
	Shock sensor	100 / 200 / 400
	Accuracy	± 5% F.S.
Sampling period (ms)	0.625 ~ 160 (selectable, 0.625ms is for vibration sensor only. ± 5% accuracy.)	
Flame	100 ~ 500000 (selectable)	
Trigger mode	Immediate / Timer / Acc. / Timer & Acc.	
Memory	4MB Flash memory (up to 500000 data)	
Power	Lithium polymer rechargeable battery (full charge time : about 60 minutes)	
Duration	Up to 72 hours (Acc. trigger mode at 20°C with full charge) *depend on temperature, measuring or battery condition	
Size (mm)/ weight (g)	W32.4 × D21.0 × H10.5 / 15	
Case material	Aluminium (with two M2 screw fixing holes)	
Operational temperature (°C)	0 ~ +60 (No condensing)	
PC software	Measuring configuration, data download, csv file output	OS : Windows7/10 (32/64bit)
Accessory	Dedicated cable for AccStick, micro USB cable	



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