

PRODUCT DATASHEET

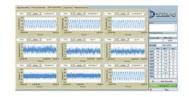
MODEL 5384 GDOF USB VIBRATION MEASUREMENT SYSTEM

APPLICATIONS:

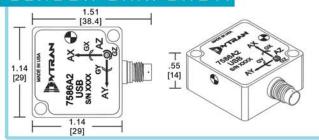
- · Automotive vibration studies
- General purpose vibration measurements
- · In-field data collection
- End-of-line testing
- Injury investigation
- · Amusement rides
- · Safety equipment
- Package testing
- Ride & handling
- Biomechanics
- · Head form
- Aerospace
- Robotics
- Sports

TOPPER OF SERVICE





SENSOR SNAPSHOT:



6 Degrees of Freedom, DC-MEMS

Eight-pole elliptical anti-aliasing filter

Small, Titanium housing, 25 grams

Rugged, Hermetically Sealed

WHAT THIS SYSTEM DOES FOR YOU:

The VibraScout™ 6DoF is an innovative, cost effective, plug-and-play, portable data acquisition system. The system is made up of 6DoF sensor model 7586A2, easy to install software and a 4-pin to USB cable. Model 7586A2 combines a 3-axis MEMS accelerometer, 3-axis gyro sensor, with a micro-controller that enables measurement of static and dynamic events. The software package supplied with each sensor allows for real time, three directional acceleration acquisition along with angular velocity measurement. It also logs real time data to a binary file for high data compression and long recording durations. This complete data acquisition system eliminates the hassle of having to use a separate data acquisition system, power supply and other ancillary equipment. Simply load the VibraScout™ software on a laptop or tablet and plug the sensor cable into the USB port.

LEARN MORE

818-700-7818 www.dytran.com info@dytran.com

Since its founding, Dytran has built a solid 35+ year industry reputation for trusted field proven experience in the design and manufacture of sensors for dynamic testing.

DEVICE FEATURES:

- VibraScout™ 6DoF System Includes:
 - 1. Model 7586A2 USB accelerometer
 - 2. Cable 6330A15: 4-pin to USB cable
 - 3. 9013 Software Toolkit (Windows 10 Compatible)
- · Available range: 14g
- 7586A2 sensor is powered via USB port
- Contains an eight-pole elliptical antialiasing filter
- Measures X, Y, Z acceleration, along with roll, pitch, yaw
- The standard USB protocol handles all the sensor communications with the PC & provides the following information
 - Storage of the acceleration, gyro, and inclination data
 - Real-time scrolling plots of acceleration data with display of min, max, instant values

SOFTWARE FEATURES

- VibraScout™ 6DoF can plot recorded data, zoom and select a specific time frame of recorded data for post processing
- Real time display of acceleration and gyro data with 5 seconds on buffer
- Export multiple file types including time data, FFT, PSD and CPB in CSV, JPG, UFF58, and MAT LAB formats
- Three channel, multi-channel, scope (rotating machinery) and real time waterfall plots
- User selectable frequency settings for windowing and frequency range settings
- API available as .NET-compatible for integration into custom test systems
- Plot overlays for channel to channel comparison



PRODUCT SPECIFICATIONS

·	ENGLISH		SI	
PHYSICAL		_		_
Weight, Max	0.88	oz	25	grams
Connector [2]	1/4-28UNF		1/4-28UNF	
Material	Ti-6AI-4V		Ti-6AI-4V	
ACCELEROMETER PERFORMANCE				
Accuracy +/-	2	%	2	%
Input Range +/-	14	g	137.3	m/s ²
Frequency Response (3dB), Nominal [3]	0 - 1000	Hz	0 - 1000	Hz
Output Noise, Max	0.01	g RMS	0.098	m/s ²
Non-Linearity, Max	1	% F.S	1	% F.S
Cross Axis Sensitivity, Max	6	%F.S.	6	% F.S.
GYROSCOPE PERFORMANCE				
Input Range +/-	6000	°/s	6000	°/s
Frequency Response +/-3dB	0-140	Hz	0-140	Hz
Output Noise, Typical	10	°/s rms	10	°/s/v Hz
Non-Linearity, Typical (@ 25C)	1	%F.S.	1	%F.S.
Zero-Rate Output +/-	5	°/s	5	°/s
ENVIRONMENTAL				
Maximum Mechanical Shock	±3000	gpk	±98100	m/s ² peak
Operating Temperature Range	-40 to +185	•F	-40 to +85	°C
Seal	Hermetic	1	Hermetic	
ELECTRICAL				_
Operating Voltage	4.9 to 5.1	VDC	4.9 to 5.1	7 VDC
	4.0 to 0.1	1 100	7.0 10 0.1	

TYPICAL SCREEN DISPLAYS

Multi-Channel View

