

PRODUCT DATASHEET

4401A2 VIBRACORDER™ II 6DOF VIBRATION RECORDER

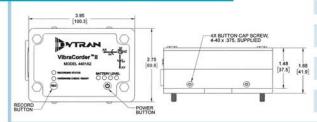
APPLICATIONS:

- Space craft or satellite over-road transportation
- Rotating machinery diagnostics
- Remote vibration measurements
- Analysis of large civil structures
- Ride & Handling
- Automotive testing
- Aerospace testing
- Vibration testing
- Impact testing





SENSOR SNAPSHOT



6DOF Triaxial Vibration Recorder

Dimensions: 3.95 L X 2.75 W X 1.48 H

Compact, Portable, 425 grams

Powerful, user-friendly software

WHAT THIS SENSOR DOES FOR YOU:

The new VibraCorder™ II is an innovative and cost-effective solution for capturing critical 6DOF vibration data, problem solving, and moving product development forward. Model 4401A2 contains a built-in MEMS-based triaxial accelerometer and a MEMS-based triaxial gyroscope capable of measuring and recording acceleration and orientation in three orthogonal directions as well as roll, pitch and yaw. Easily installed, user-configurable, relay enabled sotware optimizes data collection while built-in firmware handles acceleration in three axes as well as gyroscope data on the removable micro SD-card. This portable, environmentally sealed vibration recorder thrives in various application environments, delivering optimal static and dynamic 6DOF vibration data.

LEARN

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Since its founding, Dytran

DEVICE FEATURES

- System Includes:
 - 1. Model 4401A2 VibraCorder™ II
 - 2. SanDisk 32 GB Micro SD Card
 - 3. Software Toolkit
- · Built-in firmware handles SD card storage of triaxial acceleration and gyro data
- · Software controlled relay for the operation of external components
- Multiple recording regimes: free run, triggered event, auto stop, etc.
- Environmentally sealed, IP65 rating
- · Powered through rechargeable LiPo battery or external power
- · Low battery indicator with emergency file save feature
- Available sampling rates: 250, 1200, and 4280hz
- Multi-day recording

SOFTWARE FEATURES

- Various data export capabilities: from a simple snapshot (jpeg), to multiple digital formats: .csv, .mat, .tdms, .uff, and .sqlite
- Easy cursor operation for data selection, zoom, and cursor alignment
- Immediate data retrieval from the Micro SD card to the PC
- · High pass and low pass filtering
- Simplified version of time synchronous averaging
- · Single or double integration
- Anti-Alias Filtering
- Real time stamp
- Oversampling
- Data overlay
- FFT Analysis





PRODUCT SPECIFICATIONS

		ENGLISH		SI	
PHYSICAL		A		Man .	·o
Weight, Max.		15.8	oz	450	grams
Mounting		4x 10-32 Screws		4x 10-32 Screws	
Housing	Material	Aluminum, Anodized		Aluminum, Anodized	
INTERNAL SENSOR	PERFORMANCE				
Acceleration Range (X	, Y, Z Directions)	±16	Gpeak	±157	m/s² peak
Frequency Range (Acc	celeration), -3dB	0 to 1200	Hz	0 to 1200	Hz

±1000

0-140

Acceleration Range (X, Y, Z Directions)
Frequency Range (Acceleration), -3dB
Angular Rate Range (X, Y, Z Directions)
Frequency Range (Gyro), -3dB
Transverse Sensitivity, Max
Noise, Accelerometers.

RELAY

Max switching voltage Maximum current Insulation resistance Contact resistance Rated power Max operation time

ENVIRONMENTAL SPECIFICATIONS

Operating temperature, Discharging Operating temperature, Charging Seal

Max vibration Max shock

POWER SPECIFICATIONS

Battery, Capacity External power USB power Charge Time Charge current Charge indicator

Grms	0.025	
VDC	200	
Α	0.5	
GΩ	>10	
mΩ	100	
W	10	
msec	0.5	

-4 to +131	
32 to +104	
IP65	
200	
500	

LiPo, 2000mAh]
8 - 32	1
5	7
8	7
250	7
Yes	1

Gpeak	±157	
Hz	0 to 1200	
°/sec	±1000	
Hz	0-140	
%	5	
Grms	0.25	

200	VDC
0.5	A
>10	GΩ
100	mΩ
10	w
0.5	msec

	-20 to +55	°C
	0 to +40	°C
	IP65	
	1962	m/s ²
	4905	m/s ²
•		_

LiPo, 2000mAh
8 - 32
5
8
250
Yes

VDC VDC hours mA

°/sec

Hz

% m/s² rms

TYPICAL SCREEN DISPLAYS

°F °F

g

g

VDC

VDC

hours

mA

Acceleration Data Screen

