

CompactDAQ Shock and Vibration Test Starter Bundle

CompactDAQ test bundles offer the easiest and most cost-effective way to access the quality and flexibility of a CompactDAQ system.

Use NI DAQ sound and vibration bundle for:

- Quick sound and vibration logging
- Frequency testing
- Measurement and acoustic characterization
- Quality control at end-of-line testing
- Noise, vibration and harshness testing



Popular Features

Sensor Compatibility

Smart TEDS sensor compatibility with internal signal conditioning

Rugged

-40° to 70° C Temp range
50g shock

Coupling

Software-selectable AC/DC coupling and IEPE signal conditioning with AC coupling



Hardware Bundle for Sound and Vibration Sensors

Save money and spend less time configuring your test bundle and more time testing your products with NI's sound and vibration bundles based on CompactDAQ hardware.



cDAQ-SV1101 P/N: 865665-01		cDAQ-SV1102 P/N: 865664-01	cDAQ-SV4201 P/N: 868017-01	cDAQ-SV8203 P/N: 868173-01
Differentiation	High Channel Count	Most Popular	Customizable	Distributed Measurements
What's in the Box?				
Chassis	cDAQ-9171	cDAQ-9171	cDAQ-9174	cDAQ-9189
Module(s)	NI 9231 (x1)	NI 9234 (x1)	NI 9234 (x2)	NI 9234 (x2)
Accessories	<ul style="list-style-type: none">USB cable (A to B) with captive screw	<ul style="list-style-type: none">USB cable (A to B) with captive screw	<ul style="list-style-type: none">USB cable (A to B) with captive screwDesktop Mounting KitAC/DC power supply*	<ul style="list-style-type: none">AC/DC power supply*
Specifications (chassis)				
Bus Connector	USB			Ethernet
Slots	1		4	8
Power Required	USB 2.0 Bus-powered		9-30 VDC	9-30 VDC
Dimensions (unloaded)	131.4 mm × 88.6 mm × 33.3 mm		159.5 mm × 88.1 mm × 58.9 mm	272.8 mm × 88.1 mm × 62.3 mm
Operating Temp	-20° to 50° C			-40° to 70° C
Operating shock/vib	50 g shock and 5 g vibration			
Specifications (module)				
Connectivity	Coaxial Jack	BNC	BNC	BNC
Channels	8	4	8 (total)	8 (total)
Sample Rate	51.2 kS/s	51.2 kS/s/ch	51.2 kS/s/ch	51.2 kS/s/ch
Isolation	Channel-Earth			
Resolution	24-bit			

*IEC power cord sold separately



Replacement and Upgrade Options for Sound and Vibration Sensors

Need more channels or a different sample rate? NI offers more Sound and Vibration Modules for your sound and vibration test needs.

Sound and Vibration Modules

System Need	Connectivity	Ch	Sample Rate	Isolation	Model/PN
Lowest Module Cost	BNC	3	12.8 kS/s/ch Simultaneous	60 VDC Channel-Earth	NI-9230
Lowest cost/channel	10-32 Coaxial	8	51.2 kS/s/ch Simultaneous	None	NI-9231*
Fastest Sample Rate	BNC	3	102.4 S/s/ch Simultaneous	60 VDC Channel-Earth	NI-9232
General Use	BNC	4	51.2 kS/s/ch	None	NI-9234*

*In the Sound and Vibration Measurement Bundles

Other Popular Measurement Types

Measurement	Connectivity	Ch	Sample Rate	Isolation	Model/PN
Thermocouple	Spring terminal	16	74 S/s Multiplexed	Channel-Earth	NI-9213
Voltage Input	Spring Terminal	4	250 kS/s Multiplexed	Channel-Earth	NI-9205
Load, Pressure, Strain	RJ-50 (accessories sold separately)	4	50 kS/s/ch Simultaneous	Channel-Earth	NI-9237
Voltage, current, strain, thermocouple, RTD, ¼ ½ full bridge	Spring terminal	4	100 S/sec Simultaneous	Channel-Channel	NI-9219

CompactDAQ Chassis

Need more than four modules or a different connectivity?

Select the chassis that meets your needs. All hardware use the same software driver.

- Ethernet: 1, 4, and 8-Slot chassis
- USB: 1, 4, 8, 14-Slot chassis
- Wi-Fi: 1-Slot chassis



Contact your NI product expert to get help solving your test challenges.



Improve Test Performance with NI Software

Build an Automated Test System with LabVIEW

- Acquire data from NI hardware, 3rd party instruments, and many industry-standard protocol
- Create interactive UIs for test monitoring and control.
- Process with standard math, probability, and statistical functions.
- Integrate code written in Python, C/C++, .NET, and MathWorks MATLAB® software.
- Save data to .csv, .tdms, or any custom-defined binary file.

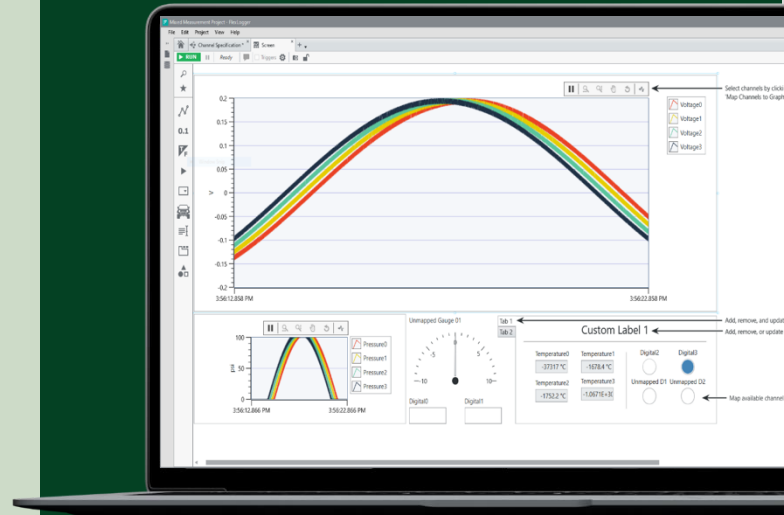
Perform Quick Tests with FlexLogger No-Code Software

- Get up and running quickly with Free version—NI FlexLogger™ Lite
- Configure quick tests with alarms, test properties, and real-time data displays
- Simplify sensor measurement with sensor-specific templates
- Log test results to .tdms or .csv files
- Add calculations for simple math, filtering, Boolean logic, and more
- Review data with an included interactive TDMS file viewer

Develop with Your Preferred Programming Language

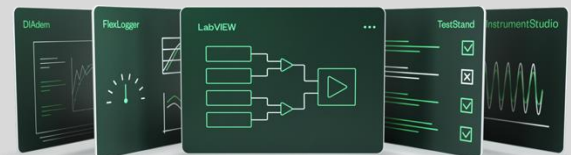
- Python
- C, C+, C#
- .NET
- MATLAB® (Contact MathWorks® for the Data Acquisition Toolbox)

*MATLAB is a registered trademark of The MathWorks, Inc.



“FlexLogger makes it easier to troubleshoot and verify that the raw data from different sensors are correct before I start my test. This helps shorten test development by saving time typically wasted on redoing configurations.”

- Andy Tarman,
Lab Test Engineer
CNH Industrial



Get FlexLogger and LabVIEW Plus More in the LabVIEW+ Suite

The LabVIEW+ Suite is a collection of LabVIEW plus, more software that provides purpose-built tools for automating measurement, analysis, and test. The software works together to save you time.

Part Number: 788509-35

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