

# CompactDAQ

CompactDAQ (cDAQ) is a modular, PC based, data-acquisition hardware platform from National Instruments. In a CompactDAQ system, a chassis is connected to your PC through USB or Ethernet, and then populated with one or more conditioned I/O modules that provide direct sensor connectivity. You can synchronize the CompactDAQ Chassis to create a distributed system. CompactDAQ Controller variants are available that run a Windows or real-time OS for stand-alone operation.

Modular means that you can configure a system with a mix of modules for different signal and sensor types. Some of the typical sensor types we have worked with cDAQ are:

## Features

- » Temperature: Thermocouple or RTD/PRT modules.
- » Force/Strain/Torque/Pressure: These all tend to use a sensor configuration called a Wheatstone bridge which has dedicated modules.
- » Vibration: These use accelerometers which require highly dynamic acquisition and IEPE excitation.
- » 4-20mA Transmitters: Many process sensors provide a current output. We have seen this with pressure transmitters, but there is a large variety available.
- » Voltage: Of course Voltage in a variety of forms from 10 to 300V with isolation and protection

