



**CAMPBELL  
SCIENTIFIC**

WHEN MEASUREMENTS MATTER



**GRANITE Series**

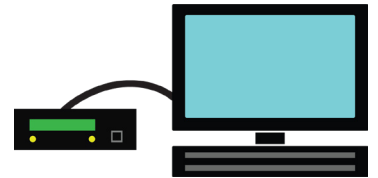
# GRANITE SERIES

## WHEN MEASUREMENTS MATTER

The GRANITE™ DAQ has been developed with over 40 years of Campbell Scientific knowledge and experience. The GRANITE series builds on our reputation by adding a new level of measurement possibilities and flexibility.

### Independent Modules

Each of the GRANITE modules can be independently connected to a computer for real-time measurements. Using the Campbell Scientific SURVEYOR support software, independent modules facilitate component bench testing and lab-based applications.



### Modular Design

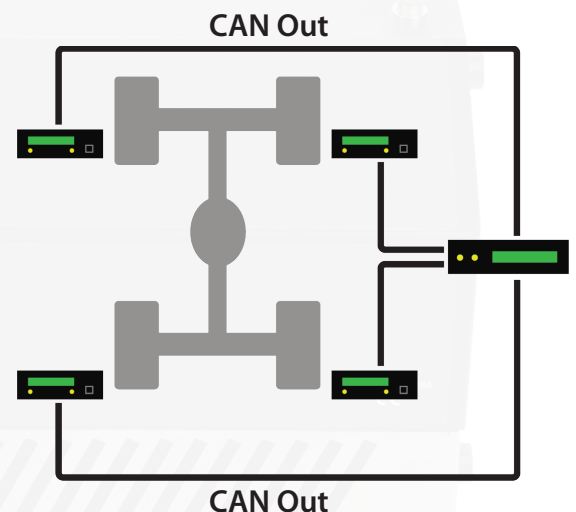
The GRANITE DAQ is modular to provide a completely customizable system. Several GRANITE modules can be configured together to get the optimal measurement types and number of channels.



### Distributed System

GRANITE modules can be centrally located or distributed throughout the measurement network. Modules are controlled and synchronized by a single GRANITE DAQ.

- › Currently used by a large wheel force transducer manufacturer to provide strain and stress information to design engineers
- › Used on HKZM bridge for dynamic vibrating wire measurements



# GRANITE Measurements



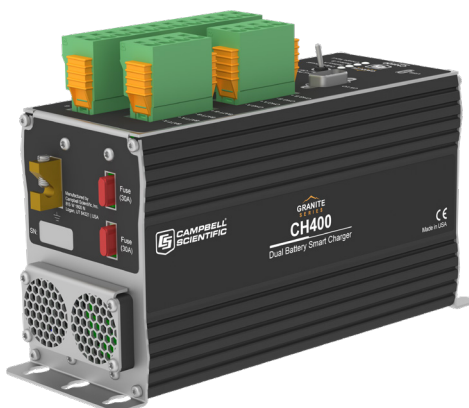
The GRANITE measurement modules allow flexibility both in measurement type and channel count.

GRANITE Module	Measurement	Channels	Notes
TEMP 120	Thermocouple	20	Measures all thermocouple types. Each channel has a dedicated reference temperature.
VOLT 108	Analog	8 or 16	The most cost effective analog measurement with 24 bit ADC resolution for voltage and bridge measurements. The VOLT 116 is capable of 16 2-wire measurements or 32 1-wire measurements. CAN 2.0B/2.0A capable.
VOLT 116	Analog	16 or 32	
SPECTRUM 103	High Speed Analog	3	10,000 Hz anti-aliased synchronous measurements with 32 bit ADC resolution for voltage and bridge measurements.
SPECTRUM 109	High Speed Analog	9	
VVWIRE 305	Dynamic Vibrating Wire	8	Dynamic and simultaneous vibrating-wire measurements at 20, 50, 100, 200 and 333 Hz.

# GRANITE Data Acquisition

For larger channel count systems or long term/remote applications, a GRANITE data acquisition system can be used as the recording and communications platform.

Data Acquisition	Notes
SURVEYOR	PC-Based Data Acquisition: Connect, view and record GRANITE modules in real time with live graphical displays.
GRANITE 6	An entry-level, rugged data acquisition system with measurement capabilities and the ability to sync multiple GRANITE modules.
GRANITE 9	Synchronize high-speed measurements on the order of 20 ns or faster. Increased system-to-system synchronization with native GPS. Capable of large-channel-count networks.
GRANITE 10	Takes the capabilities of the GRANITE 9 and adds four individual listening or broadcasting CAN channels.



# GRANITE Accessories

Accessory	Notes
CH400	Connect to AC and/or solar power with up to 800 watts of input while powering your system and charging dual battery banks
CHASSIS	Organize the GRANITE products in a clean data acquisition system platform for portable or equipment rack mount applications



# SURVEYOR

Campbell Scientific SURVEYOR data collection software allows users to graph and record live data in minutes with no prior knowledge or training.



- › Computer-based data acquisition
- › USB connection
- › Real-time measure, view, graph, record
- › Free download
- › Easy configuration, no programming
- › Minimal hardware cost
- › Ideal for desktop and lab applications