CAMPBELL SCIENTIFIC®
WHEN MEASUREMENTS MATTER

GRANITE 9
Measurement and Control Data-Acquisition System

Meeting Your Top Testing Priorities

Flexible for use in the lab and out in the field

Overview

The GRANITE™9 and GRANITE™10 are the most computationally powerful data-acquisition devices from Campbell Scientific. As an all-digital measurement and control DAQ, the GRANITE 9 is designed as the core of the data-acquisition network, integrating with all GRANITE measurement modules, including the VOLT 108, VOLT 116, TEMP 120, VWIRE 305, and CH400.

Benefits and Features

❯ Traditional network connections via Ethernet port

❯ EPI port switch for high-speed connection to all GRANITE™ measurement modules

❯ Onboard storage of streaming data with 2 GB of DDR3 SDRAM and a 64 GB solid-state hard drive (SSD)

❯ Built-in GPS for network synchronization

Detailed Description

The GRANITE 9 enables you to perform the following:

❯ Standard measurement functions

❯ Advanced math and processing functions

❯ Control functions

A complete GRANITE system installation may include the following components:

❯ GRANITE Chassis

❯ GRANITE 9

❯ CH400

❯ Power source (mains or solar)

❯ Software

Specifications

-NOTE-   *Additional specifications are listed*   *in the GRANITE 9 Specifications.*

For comprehensive details, visit: **www.campbellsci.com/granite9**

Power Requirements	9.6 to 32 Vdc (voltage input)
Real-Time Clock Accuracy	±3 min. per year
Operating Temperature Range	〉 *Non-condensing environment* 〉 -55° to +85°C (extended) 〉 -40° to +70°C (standard)
Case Material	Stainless steel 304 and aluminum 6061
Communications Ports	〉 EPI 〉 Ethernet 〉 USB Micro B 〉 USB host 〉 CS I/O 〉 0 to 5 V serial 〉 SDI-12 〉 RS-485 〉 RS-422 〉 CPI/RS-232
Data Storage Ports	〉 microSD 〉 USB host
Digital I/O	8 terminals (C1 to C8) configurable for digital input and output. Terminals are configurable in pairs for 5 V or 3.3 V logic for some functions.
Internet Protocols	Ethernet, PPP, RNDIS, ICMP/Ping, Auto-IP (APIPA), IPv4, IPv6, UDP, TCP, TLS (v1.2), DNS, DHCP, SLAAC, Telnet, HTTP(S), SFTP, FTP(S), POP3/

	TLS, NTP, SMTP/TLS, SNMPv3, CS I/O IP
Communication Protocols	CPI, EPI PakBus, PakBus Encryption, SDM, SDI-12, Modbus RTU / ASCII / TCP, DNP3, custom user definable over serial, UDP, NTCIP, NMEA 0183, I2C, SPI
Warranty	〉 3 years standard (against defects in materials and workmanship) 〉 Optional: An additional 2 years (against defects in materials and workmanship), bringing the total to 5 years
Battery-backed SRAM for CPU Usage & Final Storage	4 MB
Data Storage	4 MB SRAM + 128 MB NOR flash (Storage expansion of up to 16 GB with removable microSD flash memory card.)
Active Current Drain, Average	〉 495 mA input (12 V input) 〉 255 mA input (24 V input) 〉 ~6 W
Static Vibrating-Wire Measurements	Not supported
Dimensions	21.4 x 12.0 x 5.0 cm (8.4 x 4.7 x 2.0 in.) Additional clearance required for cables and leads.
Weight	1.0 kg (2.2 lb)

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