



GRANITE10

Measurement and Control Data-Acquisition System



Ideal for Automotive Testing Applications

Featuring CAN-bus and CAN-FD output

Overview

Similar to the GRANITE™9, the GRANITE™10 is the most computationally powerful data-acquisition device from Campbell Scientific. As an all-digital measurement and control DAQ, the GRANITE 10 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. Unlike the GRANITE 9, however, the GRANITE 10 also includes four general-purpose CAN channels. With its CAN channels, a larger 128 GB SSD, and extended temperature ranges, the GRANITE 10 is your ultimate tool for automotive testing.

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 128 GB solid-state hard drive (SSD)
- ▶ Built-in GPS for network synchronization
- ▶ General-purpose CAN channels

Detailed Description

The GRANITE 10 enables you to perform the following:

- ▶ Standard measurement functions
- ▶ Advanced math and processing functions
- ▶ Control functions

Specifications

-NOTE- Additional specifications are listed in the [GRANITE 10 Specifications](#).

Power Requirements 9.6 to 32 Vdc (voltage input)

Real-Time Clock Accuracy ±3 min. per year

Operating Temperature Range ▶ -55° to +85°C (extended)
 ▶ Non-condensing environment
 ▶ -40° to +70°C (standard)

Case Material	Stainless steel 304 and aluminum 6061
Pulse Counters	8 (C1 to C8)
Communications Ports	<ul style="list-style-type: none"> › USB Micro B › 0 to 5 V serial › SDI-12 › RS-485 › CPI/RS-232 › EPI › CAN-FD › CAN › Ethernet › USB host › CS I/O
Data Storage Ports	<ul style="list-style-type: none"> › 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, DNS, DHCP, SLAAC, Telnet, HTTP(S), FTP(S), POP3/TLS, NTP, SMTP/TLS, SNMPv3, CS I/O IP

Communication Protocols	CAN-FD, CAN, 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	<ul style="list-style-type: none"> › Optional: An additional 2 years (against defects in materials and workmanship), bringing the total to 5 years › 3 years standard (against defects in materials and workmanship)
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	<ul style="list-style-type: none"> › 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 7.5 cm (8.4 x 4.7 x 3.0 in.) Additional clearance required for cables and leads.
Weight	1.2 kg (2.7 lb)

For comprehensive details, visit: www.campbellsci.com/granite10 



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