

CENTAUR GEN5 SERIES OF DATA LOGGERS

 **Centaur**

The Future of Data Acquisition



 nanometrics

# NEW! CENTAUR GEN5 DATA LOGGER

The Centaur Gen5 series of best-in-class data loggers, powered by Strata OS, builds upon Nanometrics' almost 40-year legacy of providing high quality seismic instrumentation and systems. The Centaur Gen5 delivers a comprehensive solution for digitizing, processing, recording, and streaming data. Experience a seamless and efficient approach to Earth science research with Centaur Gen5. Its enhanced features and intuitive design simplify data acquisition and analysis, allowing you to focus on your scientific goals.

# GEN5

## Empower your Data Driven World

- **Efficiency and Cost Savings:** Reduce operational costs and streamline workflows with intuitive operation, low power consumption, and simplified deployment.
- **Enhanced Data Quality and Security:** Acquire high-fidelity data with confidence, knowing that your information is protected by advanced security measures, including memory-safe operating system and HTTPS support.
- **Intuitive and Easy to Operate:** Enjoy a rapid boot-up time and responsive UI (user interface) with optional dark mode, and a new sensor-centric configuration workflow.
- **Unprecedented Flexibility:** Meet your unique data acquisition needs with customizable settings, class-leading operating temperature range, and seamless integration of new sensors.
- **Network Reliability and Performance:** Experience network reliability, performance, and uptime with upgraded data rate statistics and a smaller, more secure operating system.

## Centaur Gen5 Series Offers Three Versatile Models

- **8-Channel:** Our most versatile data logger yet, for multidisciplinary science and complex monitoring scenarios where diverse sensor integration is required.
- **6-Channel:** Optimized for dual-sensor seismic deployments, providing increased redundancy and data richness.
- **3-Channel:** Ideal for single-sensor seismic monitoring applications where space and power efficiency are critical.

# Go Beyond Seismic with Centaur Gen5 8-Channel Model

For those seeking maximum flexibility and versatility, the 8-channel model offers expanded sensing capabilities, simplified station design and minimum footprint.

- **Multidisciplinary Sensing:** Connect a wide array of sensors, including seismometers, geophones, weather stations, GNSS receivers, environmental monitors, and more.
- **Expanded Capabilities:** Combine data from diverse scientific disciplines to gain a holistic understanding of complex systems and phenomena.
- **Single Integrated Data Logger:** Reduced station power consumption, simplified station design and workflows.
- **Future-Proofed Research:** Easily integrate new sensors and adapt to evolving research needs with our flexible Strata OS.

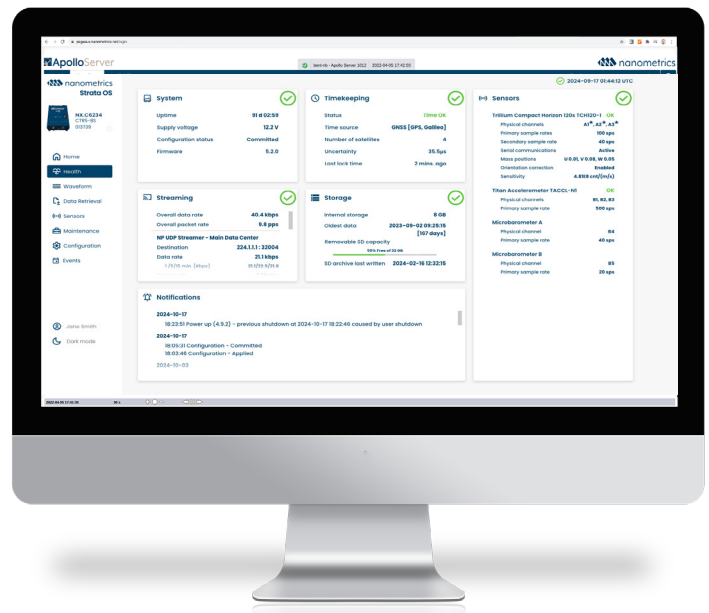


## Introducing Strata OS: The Foundation for Reliable, Secure, and Efficient Data Acquisition

### Elevating Data Acquisition with Intelligent Software

Strata OS is the powerful new operating system that drives the Centaur Gen5 series of data loggers. With a focus on ease-of-use, security, and performance, Strata OS unlocks the full potential of your data acquisition workflows.

- **Intuitive User Interface:** Experience a streamlined workflow, featuring a sensor-oriented configuration workflow and an optional dark mode.
- **Enhanced Security:** Safeguard your valuable data with robust security measures, including memory-safe operating system implementation and HTTPS support for secure communication.
- **Optimized Performance:** Maximize efficiency and data throughput with improved system responsiveness, faster boot-up times, and a smaller operating system for quicker updates.
- **Unprecedented Flexibility:** Easily adapt to evolving research needs with improved system configuration limits, seamless integration of new sensors, and application customization capabilities.



# SPECIFICATIONS

For more detailed specifications, please refer to our data sheets for the 3 & 6-channel models and the 8-channel model.

<b>Sample Rates</b>	User-selectable sample rates up to 10,000 sps simultaneously on all high-resolution channels
<b>Resolution</b>	32-bit
<b>Dynamic Range</b>	146 dB
<b>Communications</b>	Web-based graphical UI, 10/100 Base-T Ethernet, WiFi (optional), Serial via USB, UDP/IPSNM, OpenVPN®
<b>Recording</b>	MiniSEED, 8 GB internal memory, up to 256 GB options available, external SD card
<b>Streaming Formats</b>	Nanometrics NP, SeedLink, Authenticating Support CD-1.1, QSCD20
<b>Data Types</b>	Waveform data, data products, TCP streams, SOH, event/trigger data
<b>Power Consumption</b>	850 mW (3 channel), 1.2 W (6 channel), 1.4 W (8 channel)
<b>Dimensions</b>	196 mm (L) x 137 mm (W) x 88 mm (H)
<b>Weight</b>	2.2 kg (2.4 kg models CTR5-6A/S, CTR5-6AS/H)
<b>Operating Temperature</b>	-20°C to +70°C (Standard Model) / -45°C to +70°C (Polar Certified Model)
<b>Environmental Rating</b>	IP-68
<b>Timing Accuracy</b>	<5 µsec (GNSS Always on or PTP)

## 8-Channel Model

<b>Additional Features</b>	Orientation correction for azimuth & tilt, event processing, on-board calibration, extra serial port
<b>8 High-Resolution Analog Channels</b>	3 channels on Sensor A and 5 channels on Sensor B+
<b>9 Analog Channels (18-bit)</b>	3 on each Sensor port and 3 on the External SOH connector; available for sensor mass positions, sensor status, miscellaneous single channel analog sensors, tamper switches, etc.
<b>2 Dedicated Serial Ports</b>	A new auxiliary connector provides two dedicated serial ports for direct integration of serial sensors, such as weather stations
<b>Optional Centaur Breakout Box</b>	Highly flexible assembly to facilitate physical connectivity between external sensors and the Centaur Sensor B+, Auxiliary and External SOH connectors. Custom cable harnesses for specific use cases also available on request.

*Specifications subject to change without notice.*

## APPLICATIONS

### Go Beyond Seismic

- Multidisciplinary science, i.e. atmospheric monitoring
- Multi-parameter geophysical monitoring
- Volcanology and geothermal research
- Hydrological and environmental monitoring
- Atmospheric and climate science

### Demanding Real-Time and Permanent Networks

- Earthquake early warning
- Global seismic networks
- Strong motion networks
- Ocean bottom cabled arrays
- Nuclear test ban monitoring

## CENTAUR GEN5: EMPOWERING YOUR DATA-DRIVEN WORLD

Centaur Gen5 is a powerful, efficient, user-friendly, and secure data logging solution that drives innovation and discovery across a multitude of disciplines.



Listening to the Earth

Contact a Product Expert

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