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Founded

75%
R&D Personnel

400+
Global Customers

We support clients around the world by offering premium products and high-quality testing solutions.

VCARSYSTEM specializes in developing R&D testing solutions for embedded systems, serving key sectors such as automotive, education, and rail transit, among others.

VGATE Series

Vehicle Bus Data Acquisition Solution

Efficient Data Capture | Full-scenario Adaptability
Seamless Integration | Compliance & Traceability

MEET US AT GLOBAL INDUSTRY EXPOS



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Multi-Protocol Compatibility, High-Precision Acquisition - VGATE Delivers Reliable Bus Data for Automotive Excellence.

Against the backdrop of the rapid advancement of automotive intelligence and electrification, in-vehicle bus systems including CAN, LIN, FlexRay and Ethernet have evolved into the core nerve center linking the vehicle's powertrain, chassis, body control and intelligent driving subsystems.

As a specialized device dedicated to the full-cycle collection, secure storage and professional analysis of bus data, the automotive bus data logger assumes an irreplaceable pivotal role in guaranteeing the authenticity and integrity of vehicle test data, accelerating the efficiency of fault diagnosis and localization, satisfying the stringent requirements of industry compliance certification, and shortening the R&D and mass production cycles. It is an indispensable core tool that underpins the smooth implementation of vehicle R&D, verification testing and mass production processes.



Nevertheless, in the absence of such professional automotive bus data loggers, the automotive testing industry will be confronted with the following prominent pain points.

Pain Points

- Data Reliability Deficiency**
 Incomplete data collection and insufficient standardization lead to a lack of reliable basis for test conclusions.
- Time-Consuming Fault Localization**
 Intermittent faults are hard to reproduce and communication issues are difficult to quantify, making fault localization time-consuming and labor-intensive and prolonging the R&D cycle.
- Uncontrolled Test Processes**
 Inability to monitor bus status in real time and lack of an automatic alarm mechanism result in out-of-control test processes and easy omission of abnormal risks.
- Compliance & Mass Production Hurdles**
 Lack of traceable standardized data leads to failure to meet compliance certification requirements, hindered mass production progress, low efficiency in batch quality inspection, and high after-sales risks.
- High Labor Costs & Low R&D Efficiency**
 Manual data recording and sorting involve heavy workload and high errors; data requires secondary processing, leading to high labor costs and low R&D efficiency.

Solutions

To address the core pain points plaguing the automotive R&D and testing sector, VCARSYSTEM leverages its solid R&D expertise in in-vehicle bus technologies and launches a full range of high-performance automotive bus data logger products, along with a set of targeted, systematic solutions.



VG 8000 Series



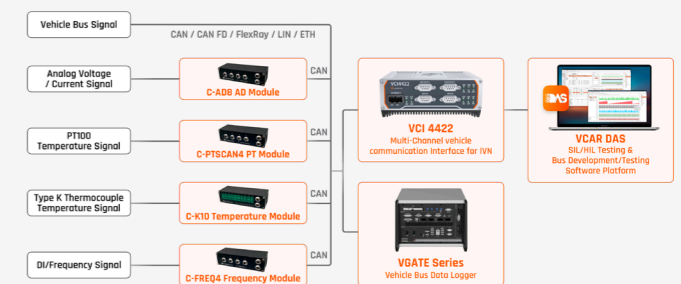
VG 4000 / 5000 Series

The product series fully supports mainstream protocols including CAN, CAN FD, LIN, FlexRay and Automotive Ethernet, featuring high-density long-duration synchronous data acquisition and high-precision timestamping. Combined with integrated solutions covering real-time monitoring, standardized storage and analysis tool docking, they effectively cut R&D cycles, reduce costs and meet strict compliance and quality inspection requirements.

Bus Data Acquisition Solution

Centered on the VGATE Series and C Module, it enables multi-dimensional and precise data acquisition.

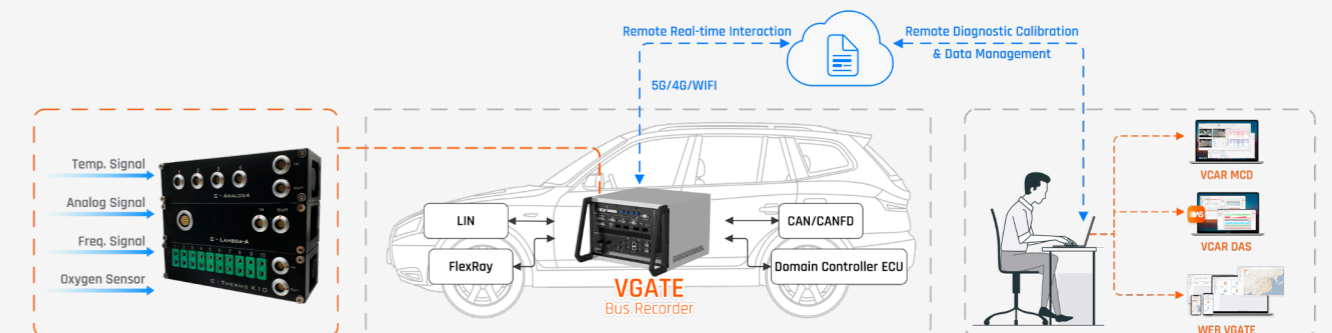
The Bus Data Acquisition solution launched by VCARSYSTEM, centered around automotive bus recorders and C modules, can cover multi-dimensional data acquisition scenarios such as temperature, voltage, current, mechanical stress, rotational speed, and air-fuel ratio. This solution supports modular flexible cascading expansion and, with its excellent stability and compatibility, has achieved large-scale application in the global automotive R&D and production fields.



Remote Measurement and Calibration Solution

Integrated with VCARSYSTEM's self-developed software, it enables remote calibration management.

The remote calibration solution provided by VCARSYSTEM integrates the calibration software VCAR MCD and the bus recorder VGATE SERIES, enabling the remote calibration function. This solution supports the XCP/CCP ON CAN and XCP ON CANFD protocols. Users can perform calibration and measurement operations on the experimental vehicle through the VCAR MCD and VGATE SERIES devices, and receive the calibration results and the measured variable values of the application.





VG8000 Series Bus Data Logger

Flagship Vehicle Bus Data Acquisition Solution — Coverage, Full-Scenario Support, Reliable Data Capture

Amid the dual momentum of automotive electrification and intelligentization, in-vehicle electronic architectures now feature more bus nodes and increasingly complex multi-system interactions. Traditional bus data acquisition solutions struggle with limited channel counts, incomplete interface coverage for diverse bus types, and single-source data capture that cannot support scenario replication.

Built to address these challenges, the VG8000 delivers full-scenario, full-interface, and highly reliable data acquisition to support vehicle-level verification, system integration, and root-cause analysis throughout the development lifecycle.

Main Functions

Comprehensive Vehicle Bus Acquisition

Native support for all mainstream in-vehicle networks: CAN / CAN FD/LIN/FlexRay/Ethernet T1, 99% high load without frame drops, Flexible channel configurations (up to 32 CAN, 26 LIN, and 32 Ethernet T1) scale from early platform bring-up to complex zonal and centralized E/E architectures.

Synchronized Video, Audio & Bus Data Capture

Standard configuration includes four 1080p@30 FPS cameras, audio interfaces, and HDMI output. Bus data is precisely synchronized with audio and video, enabling full-dimensional “data + context” scenario reproduction.

Signal Interaction & Expansion

Built-in DI/DO/AI interfaces allow direct interaction with test benches and external systems. Multiple USB 3.2 and COM ports enable easy expansion for specific instruments or sensors—without custom hardware redesign.

High-Capacity, Long-Duration Storage

Built-in 500 GB SSD with expandable 2.5-inch SATA storage (up to 4 TB), Supports the cyclic storage function with automatic overwrite when full, meeting massive data storage requirements for long-cycle tests such as road trials and durability testing.

Vehicle-Specific Scenario Compatibility

Supports a wide 9–36 VDC power input range. Select models feature ultra-low sleep current (<10 mA) to prevent vehicle battery drain, along with fast startup capability—ideal for temporary installations and long-duration road testing. Built-in GPS module, capable of synchronously collecting location data.

Extreme Environment Resilience

Operates reliably in temperatures from -40°C to 75°C and humidity from 10% to 90% (non-condensing). Designed for extreme environments such as high-altitude, high-temperature durability tests and off-road conditions—no additional protective equipment required.

Full-Lifecycle Data Processing & Intelligent Management

- Custom data file labels + multi-format time config; 6-channel button/signal-threshold dual triggers for single-end logging (multi-packet pre/post retention + parallel multi-task recording).
- Web-based remote management/config/measurement; 4G/WiFi cloud transmission + USB (time-segment/real-time) copy; NTP/PTP + RTK-PPS for high-precision sync.

Advantages

Reduced Test Complexity, Faster Root-Cause Analysis

Unified capture of all bus traffic and video/audio context eliminates tool fragmentation and synchronization issues—shortening issue localization and reducing re-test cycles.

One Platform Across the Validation Lifecycle

From ECU bench testing to full-vehicle and durability validation, VG8000 supports multiple test stages with a single hardware platform—lowering procurement, training, and maintenance costs.

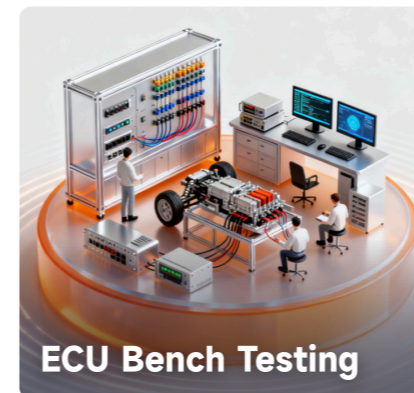
Extreme Environmental Resilience & High Capacity, Worry-Free Testing

The wide operating temperature range (-40°C to 75°C) supports all test environments without extra protection. Large onboard storage eliminates mid-test data offloading, ensuring uninterrupted long-duration testing.

Lower Operational Overhead

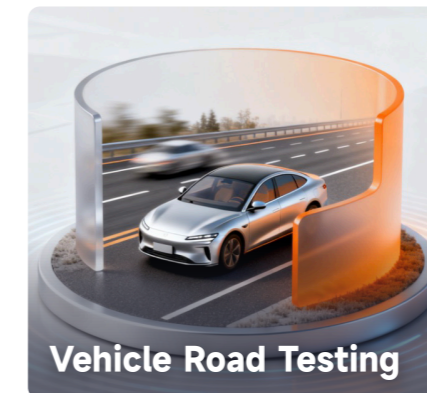
Simple deployment, minimal configuration, and user-friendly operation allow standard validation engineers to operate the system—reducing reliance on specialized resources.

Typical Applications



ECU Bench Testing

Supports data acquisition for single-ECU and multi-ECU co-simulation bench environments.



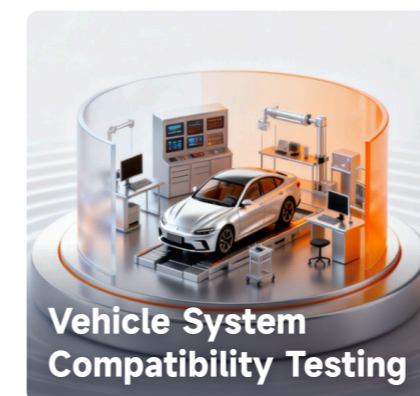
Vehicle Road Testing

On-board deployment enables high-speed, multi-bus data capture across multi-road conditions.



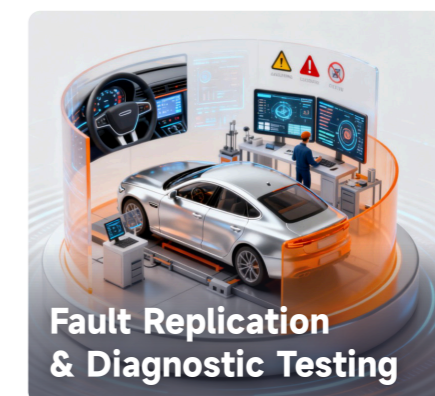
Durability & Reliability Testing

Wide temperature tolerance supports extreme high- and low-temperature durability testing.



Vehicle System Compatibility Testing

Captures cross-system bus interaction data to verify communication stability and system interoperability.






Fault Replication & Diagnostic Testing

Reproduces bus signals and physical scenarios at the moment of failure to support efficient root-cause analysis.



Get More Information

Product Specifications

| Specifications | VG8820 | VG8831 | VG8832 |
|----------------------------|---|---|---|
| Product Picture |  |  |  |
| CAN / CAN FD ^① | | 20 | |
| LIN ^② | 14 | 20 | 20 |
| FlexRay ^③ | | 1 | |
| ETH-T1 ^④ | 8 | 12 | 20 |
| ETH-RJ45 | 2 | 2 | - |
| 4G & GPS | | 1 | |
| Trigger Button / DI | | 5 × IO + 1 Wake-up | |
| Audio IN / OUT | | 1 | |
| Camera | | 4 × 1080p @ 30 FPS | |
| HDMI | | 1 | |
| RS232 | | 2 | |
| 2.5" SATA HDD Slot | | 1 | |
| Data Storage | | 1 / 2 / 4 TB | |
| USB 3.2-A | | 8 | |
| Buzzer | | 1 | |
| Quick Start | | Supported | |
| Sleep Current ^⑤ | | < 10 mA (Single Wake-up Source) | |
| Operating Voltage | | 9-36 VDC | |
| Dimensions | 300 × 373 × 210 mm | 360 × 372 × 240 mm | 360 × 372 × 240 mm |
| Operating Temperature | | -40°C to 75°C | |
| Storage Temperature | | -40°C to 85°C | |
| Humidity (Non-Condensing) | | 10%-90% | |

① **CAN / CAN FD:** Supports message ID filtering for logging; CANFD supports a maximum 8 Mbps baud rate.

② **LIN:** Supports a maximum 20 Kbps baud rate.

③ **FlexRay:** Supports a maximum 10 Mbps baud rate.

④ **Automotive Ethernet:** Configurable in bypass or transparent mode.

⑤ **Sleep / Wake Function:**

- Triggers configurable sleep countdown after bus inactivity.
- Configurable sleep sources: CAN/CANFD, LIN, 4G/WiFi transmission, automotive Ethernet host connection.
- Configurable wake sources: CAN/CANFD, LIN, I/O buttons; fast startup post wake-up.

Product Specifications

| Specifications | VG8833 | VG8834 | |
|---------------------------|---|---|--|
| Product Picture |  |  | |
| CAN / CAN FD | | 32 | |
| LIN | | 26 | |
| FlexRay | | 1 | |
| ETH-T1 | 24 | 32 | |
| ETH-RJ45 | | 2 | |
| 4G & GPS | | 1 | |
| Trigger Button / DI | | 5 × IO + 1 Wake-up | |
| Audio IN / OUT | | 1 | |
| Camera | | 4 × 1080p @ 30 FPS | |
| HDMI | | 1 | |
| RS232 | | 2 | |
| 2.5" SATA HDD Slot | | 1 | |
| Data Storage | | 1 / 2 / 4 TB | |
| USB 3.2-A | | 8 | |
| Buzzer | | 1 | |
| Quick Start | | Supported | |
| Sleep Current | | < 10 mA (Single Wake-up Source) | |
| Operating Voltage | | 9-36 VDC | |
| Dimensions | | 360 × 372 × 240 mm | |
| Operating Temperature | | -40°C to 75°C | |
| Storage Temperature | | -40°C to 85°C | |
| Humidity (Non-Condensing) | | 10%-90% | |



VG4000/5000 Series Bus Data Logger

High-Performance Bus Recorders for Automotive R&D & Production

Comprehensive Data Acquisition · Intelligent Remote Management · Global Industry Validation

The VGATE Series is a line of high-performance bus recorders engineered for automotive R&D, testing, and production. Boasting versatile models, it features flexible channel configurations, broad protocol compatibility, and seamless integration with industry solutions—delivering reliable, efficient data capture, storage, and analysis to empower automotive professionals worldwide across diverse use cases.

Main Functions

Multi-Type Data Acquisition

Supports CAN/CANFD, LIN, Ethernet, Automotive Ethernet, and FlexRay buses, paired with 3-channel 1080P@30fps or 4-channel 720P@30fps video input. Offers flexible channel combinations (8-20 channels for CAN/CANFD, 4-12 channels for LIN, 2-8 channels for Ethernet) to adapt to diverse application scenarios.

Full Protocol & Format Compatibility

Covers mainstream automotive protocols including XCP/CCP, J1939, UDS, DoIP, and FlexRay monitor. Compatible with parsing libraries (DBC/A2L/LDF/XML/ARXML) and storage formats (DAT/MF4, BLF, MP4, PCAP), seamlessly working with mainstream data analysis software.

Flexible Recording & Management

Features button/signal threshold triggering, enabling packetized recording of multi-type data before and after the time point. 4G-enabled remote management allows device control, data viewing, real-time monitoring, and remote calibration anytime, anywhere.

Industry Solution Adaptability

Seamlessly integrates with remote measurement and calibration solutions, as well as lightweight data acquisition solutions. Supports modular scalable expansion, covering multi-dimensional data collection scenarios (temperature, voltage, current, mechanical stress, etc.).

Advantages

Comprehensive Configuration Options

A full product matrix of many models caters to all scenarios from lightweight to high-density data collection, meeting needs in automotive R&D and production.

High Compatibility, Low Integration Cost

Complies with global automotive industry standards, enabling seamless integration with existing test equipment, software, and on-board systems without additional adaptation.

Efficient Operation

Remote management reduces on-site workload; targeted triggering avoids redundant data; modular design adapts to project-specific requirements, boosting overall workflow efficiency.




Stable & Proven Performance

Globally validated in large-scale automotive R&D and production, with excellent stability and adaptability to complex on-board environments.

Comprehensive Software & Hardware Ecosystem

Comes with supporting tools (vgConfig, VCAR MCD/DAS software, WEB Management Platform) and compatible modules, delivering a one-stop data collection, analysis, and calibration solution.

Product Specifications(VG58XX Series)

| Specifications | VG5820 | VG5812 | VG5808 |
|---------------------------|---|---|---|
| Product Picture |  |  |  |
| CAN / CAN FD | 20 | 12 | 8 |
| LIN | 12 | 6 | 4 |
| FlexRay | | 1 | |
| ETH-T1 | | 8 | |
| RJ45 | | 1 | |
| USB3.0 | | 2 | |
| WIFI | The WiFi module can be expanded externally (support AP/STATION) | | |
| LTE | The default is 4G and it can be upgraded to 5G | | |
| GPS | Supported | | |
| Audioport | 1× 3.5 mm two-in-one audio interfaceT | | |
| Disk | 1 TB | | |
| Consumption | < 18 W (no peripheral load) | | |
| Operating Voltage | 8-36 VDC | | |
| Operating Temperature | -40°C to 80°C | | |
| Storage Temperature | -40°C to 85°C | | |
| Humidity (Non-Condensing) | 10%-90% | | |



Get More Information



Product Specifications(VG54XX Series)

| Specifications | VG5420 | VG5412 | VG5408 |
|-----------------------|---|--|---|
| Product Picture |  |  |  |
| CAN / CAN FD | 20 | 12 | 8 |
| LIN | 12 | 6 | 4 |
| FlexRay | | 1 | |
| ETH-T1 | | 8 | |
| Camera | 3× 1080p + 4× 720p @ 30 FPS | | |
| RJ45 | | 1 | |
| USB3.0 | | 2 | |
| WIFI | The WiFi module can be expanded externally (support AP/STATION) | | |
| LTE | The default is 4G and it can be upgraded to 5G | | |
| GPS | | Supported | |
| Audioport | 1× 3.5 mm two-in-one audio interfaceT | | |
| Disk | | 500 G / 1 TB | |
| Consumption | | < 18 W (no peripheral load) | |
| Size | | 212 × 60 × 215 (mm) | |
| Operating Voltage | | 8-36 VDC | |
| Operating Temperature | | -40°C to 80°C | |
| Storage Temperature | | -40°C to 85°C | |




Product Specifications(VG52XX Series)

| Specifications | VG5220 | VG5212 | VG5208 |
|-----------------------|---|---|---|
| Product Picture |  |  |  |
| CAN / CAN FD | 20 | 12 | 8 |
| LIN | 12 | 6 | 4 |
| FlexRay | | 1 | |
| ETH-T1 | | 2 | |
| Camera | 3× 1080p + 4× 720p @ 30 FPS | | |
| RJ45 | | 1 | |
| USB3.0 | | 2 | |
| WIFI | The WiFi module can be expanded externally (support AP/STATION) | | |
| LTE | The default is 4G and it can be upgraded to 5G | | |
| GPS | | Supported | |
| Audioport | 1× 3.5 mm two-in-one audio interfaceT | | |
| Disk | | 500 G / 1 TB | |
| Consumption | | < 18 W (no peripheral load) | |
| Size | | 212 × 60 × 215 (mm) | |
| Operating Voltage | | 8-36 VDC | |
| Operating Temperature | | -40°C to 80°C | |
| Storage Temperature | | -40°C to 85°C | |

Product Specifications(VG50XX Series)

| Specifications | VG5020 | VG5012 | VG5008 |
|-----------------------|---|--|---|
| Product Picture |  |  |  |
| CAN / CAN FD | 20 | 12 | 8 |
| LIN | 12 | 6 | 4 |
| FlexRay | | 1 | |
| ETH-T1 | | - | |
| Camera | 3× 1080p + 4× 720p @ 30 FPS | | |
| RJ45 | | 1 | |
| USB3.0 | | 2 | |
| WIFI | The WiFi module can be expanded externally (support AP/STATION) | | |
| LTE | The default is 4G and it can be upgraded to 5G | | |
| GPS | | Supported | |
| Audioport | 1× 3.5 mm two-in-one audio interfaceT | | |
| Disk | | 500 G / 1 TB | |
| Consumption | < 18 W (no peripheral load) | | |
| Size | 212 × 60 × 215 (mm) | | |
| Operating Voltage | 8-36 VDC | | |
| Operating Temperature | -40°C to 80°C | | |
| Storage Temperature | -40°C to 85°C | | |

Product Specifications(VG4XXX Series)

| Specifications | VG4206 | VG4006 | VG4002 |
|-----------------------|---|---|---|
| Product Picture |  |  |  |
| CAN / CAN FD | 6 | 6 | 2 |
| LIN | 2 | 2 | - |
| FlexRay | 1 | 1 | - |
| ETH-T1 | 2 | - | - |
| RJ45 | | 1 | |
| USB3.0 | | 1 | |
| WIFI | The WiFi module can be expanded externally (support AP/STATION) | | |
| LTE | | 4G | |
| GPS | | Supported | |
| Disk | | 128 GB / 500 GB / 1 TB | |
| Consumption | < 18 W (no peripheral load) | | |
| Size | 138 × 144 × 55 (mm) | | |
| Operating Voltage | 8-36 VDC | | |
| Operating Temperature | -40°C to 80°C | | |
| Storage Temperature | -40°C to 85°C | | |



Data Acquisition Module - C Module Series

Portable high-precision sensor data acquisition unit

Full-Scenario Precision Capture, Robust Protection for Demanding Tests – Stable, Accurate, Flexible Data Acquisition!

The C Module series is an all-in-one data acquisition solution for automotive and industrial use. It covers analog, temperature, lambda, frequency, high-voltage, and high-speed vibration signals, with 24-bit resolution, up to 200kHz sampling, $\pm 0.1^\circ\text{C}$ temperature accuracy, and ± 0.005 lambda precision. Built for harsh environments (-40°C ~ 85°C , IP65/67, full electrical isolation), it supports multi-module daisy-chaining and CAN/Ethernet dual output. Seamlessly integrating with mainstream test systems, it's ideal for vehicle data acquisition, new energy tests, and engine monitoring – reliable, efficient industrial-grade precision.



Main Specifications

| Specifications | Aggregate Module-C-Multi LTK10 | | |
|----------------------------|---|--|--|
| Product Picture | | | |
| Data Acquisition Type | Temperature | Turbocharger Speed | Air-Fuel Ratio |
| Channel Configuration | 10-channel temperature input | 1 speed sensor interface | 1 linear oxygen sensor interface |
| Measurement Accuracy | $\pm 1^\circ\text{C}$ (Ambient Temperature: -40°C to 105°C) | (30 blades): $\pm 0.25\%$ | AFR: IP accuracy $\pm 0.1\% + 0.007 \text{ mA}$ λ accuracy: ± 0.005 (when $\lambda \approx 1$) |
| Measurement Range | -100°C to $+1250^\circ\text{C}$ | 10 blades: 0–320,000 RPM 30 blades: 0–100,000 RPM | LS4U.2: 0.55–32.767 LS4U.9: 0.650–15.990 |
| Sampling Rate / Resolution | Sampling frequency: 0.2–10 Hz (Adjustable) Data transmission period: 100–5000 ms (Adjustable) | Resolution: 12 RPM (10 blades) 4 RPM (30 blades) | Sampling frequency: 100 Hz |
| Output Interface | CAN communication interface | | |
| Protection Rating | High waterproof and dustproof rating, suitable for harsh environments | | |
| Supported Features | Supports daisy-chain connection of multiple modules for expanded signal acquisition Electrical isolation (input, CAN, power supply, enclosure) | | |
| Application Scenarios | Vehicle data acquisition, vehicle energy flow management, high-voltage applications | | |

Main Specifications

| Specifications | Analog Acquisition | Temperature Acquisition | | Lambda Acquisition |
|--------------------------------|---|--|--|--|
| | C-AD4/8 | C-Thermo-K10/20 | C-PT100 | C-Lambda |
| Product Picture | | | | |
| Channel Configuration | 4 / 8-channel voltage input | 10 / 20-channel K-type thermocouple input | 4-channel PT sensor interface (compatible with 2-, 3-, and 4-wire systems) | 1-channel linear oxygen sensor interface |
| Measurement Range | $\pm 60 \text{ V} / \pm 10 \text{ V}$ (adjustable) | -100°C to 1250°C | -200°C to 850°C | AFR (compatible with LSU4.2 / LSU4.9) |
| Measurement Accuracy | $\pm 10 \text{ mV} / \pm 5 \text{ mV}$ | $\pm 1^\circ\text{C}$ (Ambient Temperature: -40°C to $+85^\circ\text{C}$) | $\pm 0.1^\circ\text{C}$ (Ambient Temperature: -40°C to $+85^\circ\text{C}$) | AFR: $\pm 0.1\% + 0.007 \text{ mA}$ λ accuracy: ± 0.005 ($\lambda \approx 1$) |
| Sampling Resolution | 24-bit (Adjustable) | - | - | 16-bit |
| Sampling Rate / Response Speed | 1 Hz to 1 kHz (Adjustable) | 0.2 Hz to 10 Hz (Adjustable) | 0.1 Hz to 10 Hz (Adjustable) | 100 Hz |
| Output Interface | CAN Output | CAN Output | CAN Output | CAN Output |
| Protection Rating | High water and dust resistance | Harsh environment resistance | Harsh environment resistance | Full electrical isolation |
| Insulation Performance | Full electrical isolation | | | |
| Supported Features | Supports daisy-chain connection of multiple modules for expanded signal acquisition | | | |
| Data Transmission Cycle | 1 ms to 1 s (Adjustable) | 100 ms to 5000 ms (Adjustable) | 100 ms to 5000 ms (Adjustable) | 10 ms |
| Application Scenarios | Vehicle data acquisition, vehicle energy flow management | Vehicle data acquisition | Vehicle data acquisition | Automotive exhaust measurement, vehicle data acquisition |

Main Specifications

| Specifications | Frequency Acquisition | High-Voltage Acquisition |
|----------------------------|---|--|
| | C-FREQ | HV-MODULE |
| Product Picture |  |  |
| Channel Configuration | 4-channel frequency input | 1x high-voltage measurement channel Input cutoff frequency: 2 kHz Input impedance: 21 MΩ |
| Measurement Accuracy | Input voltage: ±60 V High / low level thresholds (Adjustable) | ±2 V (-40°C to 85°C) |
| Measurement Range | 0.1 kHz to 300 kHz | ±1100 V |
| Sampling Rate / Resolution | Sampling rate: 1 ms to 1 s (Adjustable) Resolution: 16-bit | Sampling rate: 1 Hz to 1 kHz Resolution: 24-bit |
| Output Interface | CAN Output | Standard CAN Output |
| Protection Rating | High-voltage resistant, harsh-environment resistant | |
| Supported Features | Supports daisy-chain connection of multiple modules for expanded signal acquisition | |
| Application Scenarios | Vehicle data acquisition, vehicle energy flow management, high-voltage scenarios | Vehicle data acquisition, vehicle energy flow management |

Advantages



Analog Acquisition
(C-AD4/8)

Adjustable precision + concatenation flexibility – stable analog capture in harsh industrial environments

Reduce equipment procurement costs; ensure 99.9% data integrity in extreme industrial scenarios; simplify test setup with flexible parameter adjustment.



Temperature Acquisition
(C-Thermo-K10/20, C-PT100)

High-channel density + ±0.1°C accuracy – master -100 °C ~ + 1250 °C temperature monitoring effortlessly.

Improve writing efficiency; lower maintenance costs; guarantee reliable data in extreme cold/hot test environments (e.g., vehicle winter testing)



Lambda Acquisition
(C-lambda)

Full electrical isolation + 100Hz response – capture lab-grade lambda data plug-and-play.

Ensure compliance with automotive EMC standards; save testing time; provide trustworthy data for emission control system optimization.



Frequency Acquisition
(C-FREQ)

±60V wide input + adjustable thresholds – scale frequency testing with multi-module expansion.

Eliminate extra adapter costs; improve test efficiency ; support integrated testing of multiple frequency-based components (e.g., motors, sensors).



Combined Acquisition
(C-Multi LTK10)

All-in-one temp/lambda/turbine speed – cut wiring chaos, thrive in high-voltage harsh conditions.

Reduce wiring complexity; avoid data asynchrony risks; adapt to high-voltage/extreme condition testing (e.g., off-road vehicle trials).



High-Voltage Acquisition
(HV-MODULE, C-HV-K4)

Triple insulation + voltage-temp integration – safe, stable ±1500V high-voltage testing.

Ensure operator safety in high-voltage tests; cut equipment investment; simplify new energy vehicle power train testing.



Get More Information