neoVI Connect

Ruggedized IP67 Data Logger, ECU Simulator, and Gateway Solution in Production-Ready Form Factor

Whether you're in need of a versatile standalone data logger, an advanced ECU simulator, or a cutting-edge Gateway module to bridge between different networks, the neoVI Connect is your answer. Crafted in a production-ready form factor, the neoVI Connect is engineered to streamline your development process, minimize costs, and capture your vehicle network data. The neoVI Connect establishes a robust and adaptable foundation, enabling seamless integration of application and service functions for vehicle manufacturers and service providers within a single control unit. Leveraging decades of expertise in vehicle networking tools, electrical



and electronic architecture, real-time solutions, IoT, and hardware, Intrepid Control Systems presents the neoVI Connect as the driving force of the automotive industry's future. The neoVI Connect will be found in many vehicles in the coming generations.

Benefits

- · Ruggedized IP67 Standalone data logger
- Remote data logging with auto-download via Wi-Fi, 4G or Ethernet
- Standalone ECU simulator
- · Central Gateway Module
- In-vehicle data acquisition system
- Captive test fleet data collection
- Fleet management

Features

- 8x DW CAN / CAN FD Channels with Software Enabled CAN Termination
- 2x LIN channels
- 1x Gigabit Ethernet (100/1000BASE-T) for use with DoIP, XCPoE and more

- 64 GB eMMC, with larger capacity available upon request.
- Remote or wireless standalone data logging capabilities
- Internal Cell Modem, WiFi, and GPS/GNSS
- · Sealed connectors
- 9 DOF IMU (accelerometer, gyroscope and magnetometer)
- Device uses mTLS for secure communication with wireless neoVI cloud

Standalone Logging, Scripting, & Simulation

The neoVI Connect operates in a standalone mode – that is, it runs independently from a computer. It can run real-time scripts, log data to internal storage, and simulate ECUs and gateways. The neoVI Connect also has a real-time clock for hardware timestamping of all messages. A robust power management system automatically powers down the neoVI Connect



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and it wakes up again based on network activity.

Wireless neoVI for Remote Management:

Utilize Wireless neoVI to remotely configure, script, and manage data on the neoVI Connect. This web-based platform provides fleet and data management services, allowing you to access GPS locations, perform automatic data downloads, and export data in your desired format. Enjoy the convenience of wireless control and data management.

- Remotely capture and download data logging file
- Remotely activate, deactivate, and reprogram neoVI Connect
- · Remotely post-process multiple sets of data
- Run on Intrepid's servers or independently on your own
- Control loggers from a web portal on your PC or mobile device
- Manage your fleet with automated on-demand reporting, dynamic issues management, and vehicle management for the transportation and

construction industries

• Track your fleet with geo-fencing, location reporting, and historical GPS reports

The Power of Scripting – CoreMini

If you need to support a proprietary protocol, set up a simulation to run in parallel with the data logger, or any other custom action, the system offers a scripting environment for you to expand the base functionality to fit your unique needs. This makes the entire system very flexible and adaptable.

Remote Connectivity and GPS Location

The neoVI Connect provides several ways of connecting remotely: internal 4G data modem, onboard dual-band 802.11a/b/g/n WiFi. In addition, the neoVI Connect has a 10 Hz GPS accurate to within 2.5 meters. GPS is provided both as a fleet management tool and within the data logging session for correlating location to your test data.

Logging While Downloading from Massive On-Board Memory

With the power of Linux embedded operating systems, data can be downloaded without interrupting or slowing down acquisition. The neoVI Connect comes with a default 64GB eMMC storage, enabling you to capture on the order of hundreds of billions of messages! This means that you won't have to worry about losing data when you are in an area with no wireless coverage, or if you have a network outage.

Create Your Application Using the Included Intrepid API

The neoVI Connect supports various development options, including the SocketCAN Kernel, the Intrepid open-source API available on GitHub (libicsneo and python_ics), and the neoVI DLL with helpful examples for programming in Visual C++, C#, and Visual Basic.

Need a custom solution? Let's Talk:

Our dedicated applications engineers and experts are happy to review your request. Please fill out a comprehensive description of the application and related requirements to help us better understand your needs.



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neoVI Connect Specifications:

Storage Temperature	-40C to +85C
Operational Temperature	-40C to +85C
Thermal Shoc	SAE J1455
Humidity	SAE J1455
Salt Fog:	SAE J1455
Immersion:	SAE J1455*(IP67 or better)
Mechanical	MIL 810H or better (commercial half-sinusoidal shock 10G in x-y-z)
Drop Test	SAE J1455
Vibration	MIL 810H
EMC	CISPR 25, CISPR 32, CISPR 35, IEC 61000-6-3
Manufacturing	ISO9001

Ordering Information

Part Number	Description
neoVI-Connect	Ruggedized IP67 Data Logger, ECU Simulator, and Gateway Solution in Production-Ready Form Factor

* Specifications subject to change; please contact Intrepid for the latest information. All trademarks are the property of their respective owners.

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