Didcom Canlogger Guard® V1.0

CLG It is a device specially designed for obtaining engine data, conversion of proprietary CANbus protocols and CAN J1939 not standardized to SAE J1939, such data can be sent to a compatible telemetry equipment, the device has the local engine protection functionality or remote through the reading of critical values, depending on the above the module can send alerts to the driver, additionally, the device has the ability to filter engine parameters and fault codes and also can make calculations of non-existent data such as such in the CANbus, which allows obtaining new parameters that are of importance.

Features

The device can be connected directly or non-intrusively to the CAN network of a vehicle, it identifies and associates the protocol automatically, once established the communication has read access to the CANbus information, so that the data read they are converted to the SAE J1939 standard protocol, filtered, or perform local actions if the protection variables are outside the operating ranges, it is even possible to perform calculations to obtain new specific and interesting variables.

The information generated for analysis can come from 4 sources such as: **Engine data, fault codes, "custom data", "Status data", "MIME" and status messages of the device.**

As main feature the data that is processed can be referenced with value and date, the above allows to create history tables for each recorded event, thus obtaining the data for analysis, with which it is possible to identify and prevent problems in vehicles and even get behavioral statistics.

Additionally, the device has the option of adding and editing parameters to be filtered through the RS-232 communication port which is integrated into a telemetry device with two-way communication or to an on-board PC. *
The CLG device has 4 LED indicators visible to the user, these are to know the status of incoming and outgoing communication, in addition to providing information on engine protection functionality.

Examples of application of CLG parameters

Protection parameters: Increase the safety of your drivers and vehicles, the engine protection function will help you avoid serious mechanical problems or even accidents.

Vehicle performance parameters: Control the use of your vehicle and reduce maintenance costs.

Travel parameters: Analyze the driver's conscious driving behavior and reduce fuel costs.

Fault Codes: Check your units with active fault codes on time and anticipate problems with units en route. Driver awareness driving and reduce fuel costs.

Parameter configurator: Receive only parameters of interest for analysis and avoid data saturation, configuring only variables of importance to consideration.

Collar protection parameters: Directly integrate the CLP DO / LIN V1.0 product, for the direct and automatic protection of the gearbox.

CLG reads vehicle information through HRN-FMS04-MFT02-50C-CAN included with the device, making a direct connection to the vehicle, in case of requiring an isolated connection this connection can be replaced by the corresponding accessory and can read of data in a non-intrusive way with EHR-FMS04-NMC02-100C.

Obtained the information it is possible to perform several functions with it, such as data conversion to standard J1939 protocol, sending fault codes existing in the vehicle, calculating and sending variables not existing in the bus and that are of importance, handling of motor protection locally through the use of critical variables issuing real-time alerts through the RS-232 communication port, this in turn integrated with a compatible telemetry equipment, sending extra information obtained from the network on the RS-232 port mentioned, parameter control, filters and alerts remotely.

Integration with collar protection module CLP LIN / DO V1.0 *, CLG V1.0 is responsible for feeding the necessary data to this device, the module having an alert of protection conditions sends the information about auxiliary CANbus, for later be sent remotely through the telemetry equipment.

In addition, the team can send status messages, which helps to know the conditions in which it is located.
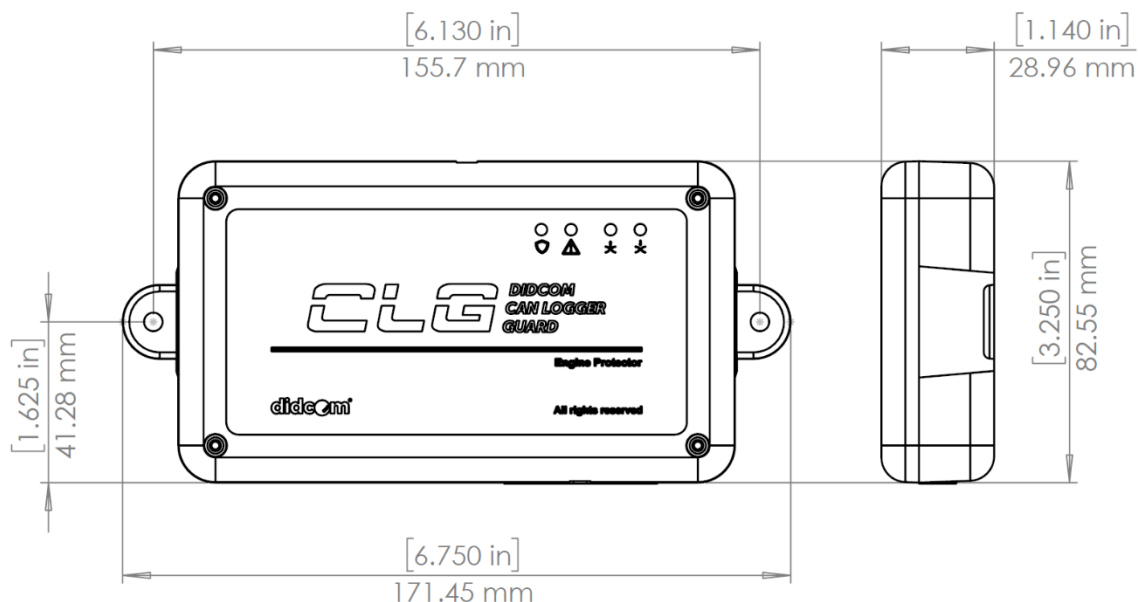
Aplications

The CLG V1.0 device can be used in vehicles of several compatible brands for reading, obtaining and sending engine data including fault codes, either of standard data or specific owners for each vehicle, this through the integration of a telemetry equipment, with which the information can be sent remotely over a cellular network, and receiving the information on a WEB platform where a large number of reports or analyzes can be made based on the valuable information obtained.

In addition to the data already obtained, extra data can be sent through the RS-232 communication port and / or make adjustments to the protection parameters such as: maximum and minimum ranges for each variable, enable or disable alert actions (buzzer) and even activating or deactivating the local protection functionality, in addition to this it is possible to configure the filtering of data for sending, using the latter we can add or edit motor variables supported by the device.

The CLG V1.0 device can be integrated into telemetry equipment that supports connection to CANbus SAE J1939, via OBDII connector on terminals 6 (CANHigh) and 14 (CANLow).

NOTE: *The data obtained will depend on the filter applied in the Telemetry equipment used.*

Mechanical Dimensions

Specifications

CLG V1.0®	
Signals E/S	
Power supply	Systems12V/24V DC , maximum 172mA/91mA
Protections	Against Short Circuit: F1= 3 A, 32V miniATO ***Replace with the same value.***
	Polarity of Inverted Connection
Comunication	Mode RS232, 115200 baud, Protocol DIDCOM®
Input Interface	Read Only CANbus 250Kbps
Output Interface	Standard CANbus SAE J1939, 250Kbps
Auxiliary I / O Interface	CANBus, DIDCOM® Protocol Propietary
Digital I / O interface	1 Opto input coupled for reset button 2 Outputs for activation of visual and auditory alerts 2 Power outputs for actuators +/-
Visual interface	4 Status LED, 1 alert LED .
Auditable interface	Buzzer,(beep)
Energy consumption	Module CLG V1.0 <2.5Watt
Case material	ABS Black Color, Flame retardant.
Protection Case Index	UL94V-0
Temperature range	−40 a +85 °C
Net weight	Module160 gr / Module with harness 765 gr

Engine Data

Speed and Cruise control
- Speed wheel based
- Odometer
- Cruise Control Active
- Cruise Control enable
  High Speed Control Limit Cru

Engine
- RPM
- Engine Hours
- Coolant Temperature
- Coolant Level
- Engine Oil Temperarature
- Engine Oil Level
- Engine Oil Pressure
- Idling Hours
- Engine Warning Light

Transmission and Gears
- Actual Gear
- Transmission Oil Level
  Transmission Oil Tempera

Braking analysis
- Brake Pedal Position
- Parking Break

Fuel Analysis
- Total Fuel Used
- Fuel Level
- Average Fuel Economy
- Idling Fuel
- Driving Fuel

Others
- Seat belt driver
- Accident event
- Airbag warning light
- Tire warning light
- ABS warning light
- Generic access door
- Hybrid detection
- Windshield fluid level
- Tire temperature
- Vehicle tilt angle
- Active vehicle
- Injection control pressure
- Active PTO

Códigos de Falla
- Diagnóstico

Critical Engine Variables.

The operating ranges of each of the listed engine protection variables can be edited by the user through the device platform remotely.

Protection
- Idle time
- Low Oil Engine Pressure
- Low Coolant Level
- High Coolant Temperature

NOTE: Not all parameters listed are available for each vehicle. The availability of the data will depend mainly on the communication protocol of the vehicle as well as the brand, model, year and the configuration of the vehicle itself. Please contact DIDCOM® support for review of supported parameters.

Connection diagram
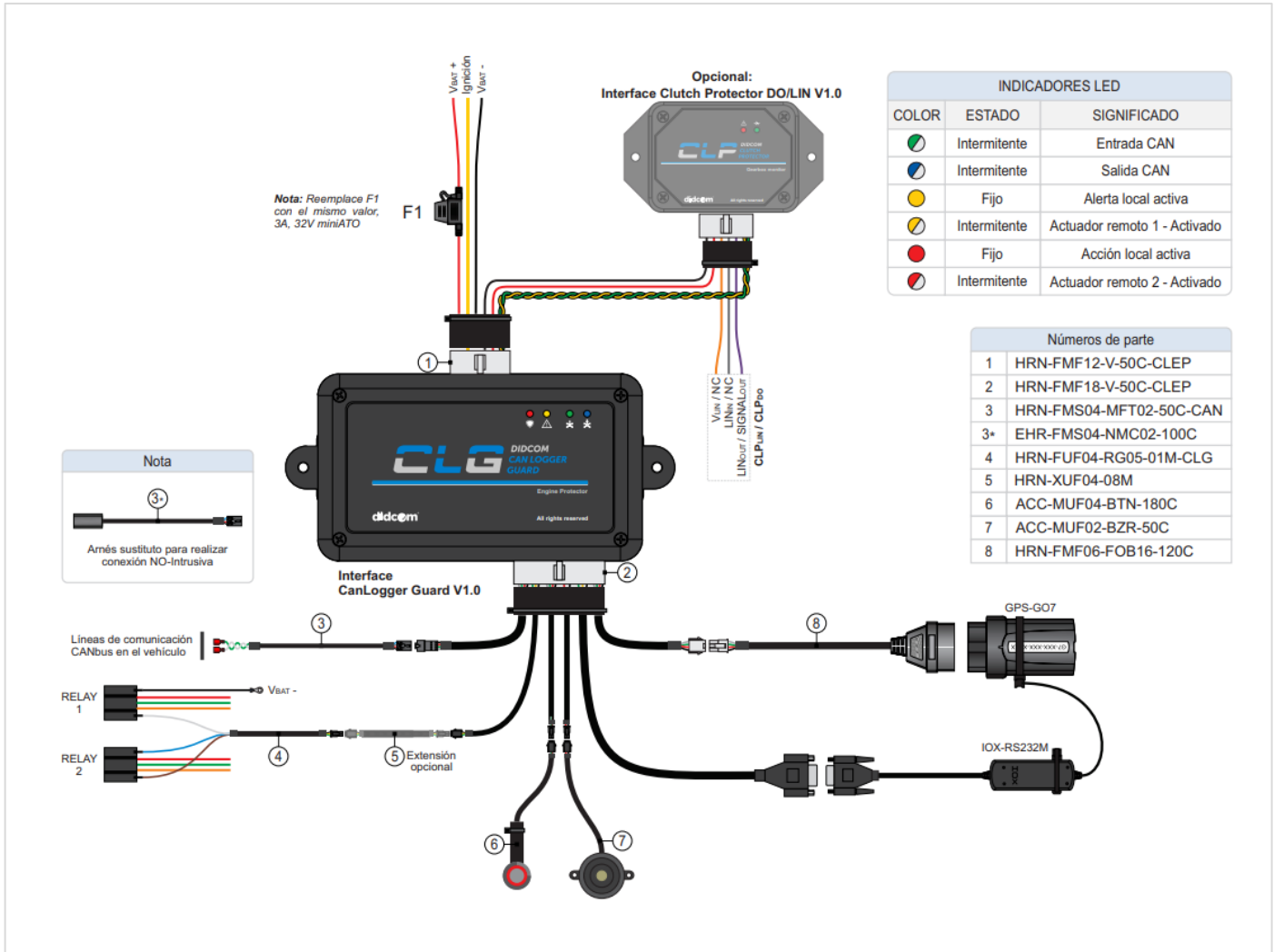
Números de Parte

Didcom Canlogger Guard® V1.0 (Opciones de Dispositivos y accesorios)			
Soporte de protocolos CLG V1.0	Entrada de datos estándar J1939 250kbps, MAN,VW, Scania, entre otros Protocolo CANBus propietario didcom para integración con módulo **Clutch protector DO/LIN V1.0.**		
Accesorios		Incluido	Opcional
HRN-FMF12-V-50C-CLEP HRN-FMF18-V-50C-CLEP	Arneses principales para CLG V1.0 e integración a módulo Clutch Protector V1.0	*	
HRN-FMS04-MFT02-50C-CAN	Arnés Par Trenzado CANbus	*	
EHR-FMS04-NMC02-100C	Arnés CANbus de Conexión NO-Intrusiva		*
HRN-FUF04-RG05-01M-CLG	Arnés para actuadores (RELAY 1 y 2)	*	
HRN-XUF04-08M	Extensión de 8 m para arnés de actuadores		*
HRN-FMF06-FOB16-120C	Extensión OBDII CANbus, Conexión a Telemetría	*	
ACC-MUF04-BTN-180C	Accesorio Boton reset de alertas	*	
ACC-MUF02-BZR-50C	Accesorio Buzzer indicador de alertas.	*	

Important safety and usage information.

WARNING! The devices to be installed must be firmly fastened so as not to interfere with the controls of the vehicle, some of the cables with which they could interfere are those of the accelerator pedal, brake and clutch. For this procedure make use of plastic straps to fix the devices including their respective cables, they must be fastened along the harness and the module itself. The use of belts is essential in the installation since if they are not used the vibration of the vehicle can loosen the connection, indirectly causing some part of the vehicle to fail, control is lost or serious damage occurs. Inspect connections regularly to avoid accidents.

WARNING! If at any time after installing a new device in the vehicle a warning light on the dashboard comes on, or a general failure is caused, turn off the engine, remove the device and contact your dealer. Continuing to use the vehicle with any of these conditions may cause major failures to the vehicle, or cause loss of control of the vehicle.

WARNING! Devices connected to the vehicle must be kept clean, dry and free of contaminants; If this is not the case, it may present a malfunction or cause a short circuit, with the risk of accidents such as fire, damage to the vehicle or serious injury.

WARNING! Do not attempt to switch devices between vehicles where they were originally installed to install them in others. Not all vehicles or connection types are compatible; Doing so could have an unexpected effect with the connection to the vehicle, even causing the vehicle to fail or run erratically, causing more serious problems to the vehicle. If you have questions about compatibility or connection between devices, contact your distributor.

NOTICE

The device does not have any type of maintenance that can be performed by the user. Only distributors or installers authorized by the company can handle special configurations, maintenance and / or repairs. If any type of violation or maintenance of these products is made without the relevant authorization, the product warranty will be voided immediately.

NOTE: RevA Data Sheet first edition October 02/19.

The information contained in this document regarding the device, features and applications is provided for the convenience of the end user and may be replaced by subsequent updates. It is the responsibility of the end user to ensure that the specific application is complied with the use of the device. DIDCOM® DOES NOT MAKE ANY MANIFESTATION OR OFFER ANY EXPRESS OR TACTILE WARRANTY, RELATED TO THE INFORMATION CONTAINED IN THIS DOCUMENT RELATING TO QUALITY, PERFORMANCE, TRADE OR FITNESS TO COMPLY WITH THE PURPOSES OF THE END USER. This document does not grant license or assignment of industrial property rights, copyrights or any other protected by intellectual property laws in favor of Grupo Tecnologico Didcom S.A de C.V.

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Company information and support.

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