DunaDiag

Technical specifications v2.0

DunaDiag is a versatile device for monitoring and controlling remotely a mobile system. Thanks to its diversity of connectivity capabilities, it is an ideal tool for multiple applications inmany industrial fields such as : :

- Vehicle driving tests
- Autonomous data recording
- Vehicle fleet management
- Energy saving
- Remote diagnostic

The characteristics given below are presented for the standard product. They can be customized for your own application upon request.

Advantages:

- Bluetooth 4.0
- USB 2.0 Interface
- WiFi b/g/n
- 3G
- GPS/GNSS 10Hz
- Accelerometer
- MQTT, M2M communication protocol
- SSL: secure communication protocol (SSH possibility)
- Robust & discreet housing
- Automotive compliant

Features:

- 2 CAN acquisition channels
- Configuration & firmware update through USB / 3G / WiFi
- Upload required data through USB / WiFi / 3G
- Support UDS / KWP / DiagOnCan
- Support OBD2 Protocol
- If no connectivity available, possibility of recording data on board with uSD card

Hardware specifications:

Interface

Inputs/Outputs		
CONN	I/O	CAN1_H High Speed (Low speed optional)
	I/O	CAN1_L High Speed (Low speed optional)
	GND	Ground
	VCC	POWER SUPPLY 9V-35V
	I/O	CAN2_H High Speed (Low speed optional)
	I/O	CAN2_L High Speed (Low speed optional)
	I/O	APC
	I/O	Relay drive output
	I/O	Trigger input
Extension Conn IO	Up to 18 I/O, up to 2 UART, 1 SPI	
µSD-Card	µSD-card connector	
µSIM	µSIM connector	
Below component depends on chosen options		
µUSB	µUSB connector for computer interface	
J1	GPS Antenna	Included in the package with 3m length cable and magnet fixation.
J2	3G Antenna	Included in the package with 3m length cable.
J3	WiFi Antenna	Included in the package with 3m length cable.
IHM		
1	CAN activity LED	Led blinking when there are CAN frames on the buses
2	Bluetooth/3G/WIFI/USB activity LED	LED blinking when there is connectivity activity
3	µSD-Card activity LED	LED indicating write/read activity
4	POWER	LED on when device is powered up.

Mechanical Characteristics

Temperature range	-30 to +85 °C
Size	8,5 x 5,6 x 2,7 cm
Weight	110 g
Humidity	<70 %

Electrical Characteristics

Voltage supply	9V to 35V
Current consumption	From 30mA to 700mA, depends on options
Memory	External memory: SD card up to 64gigabytes

Function Characteristics

Data acquisition

The following data can be measured by the DunaDiag:

- CAN frame (High Speed, Low Speed, single wire)
- GPS information (latitude, longitude, Speed, Date)
- Digital input
- DunaDiag Real Time Clock (value and GPS synchronization status)
- ADC

Data storage on SD Card

Storage of the data on the SD card is triggered when the programmed ID is detected. After triggering the data is recorded for a period length that can be configured by the software.

Only post triggered recording is possible.

Data transmission by GSM

In this mode, received CAN frames can be transmitted to server through the 3G connection. Data transmitted is all the frames recorded during a defined duration or a number of frames.

The sending is triggered by the DunaDiag.

Also possible to upload the data file, firmware and configuration update.

Configuration

To configure the DunaDiag, the configuration file is stored on the SD card. At start-up the DunaDiag will read the file and start action accordingly. This can be customized so that the configuration is embedded in the internal memory, configuration would be done by USB/Bluetooth/WiFi or 3G.

Support and services

Technical support

The purchase of DunaDiag includes one year access to remote technical support

Support is provided from Franc.
By email: support@dunasys.com

Repair

While you may never need your hardware repaired, Dunasys understands that unexpected events may lead to necessary repairs. Dunasys offers repair services performed by his technical staff who will quickly return your device with the guarantee that it will perform to factory specifications. For more information contact your sales contact.

Ordering information

Select your product reference in the table below.

Product		Part number
DunaDiag		DDG

Note that if you want to use GSM function, you must purchase a SIM card and apply for telecommunication service from an operator.