OMEGAS 4.0

FEATURES

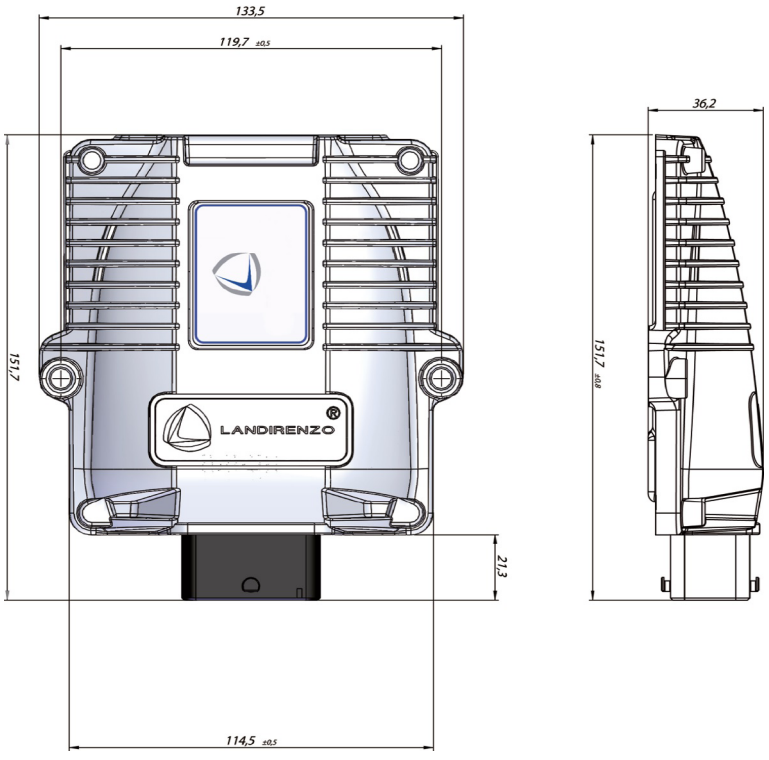
The LANDIRENZO OMEGAS 4.0 electronic control unit with an aluminium body, designed and built for integration with the electronics on new generation Euro 4, Euro 5 and Euro 6 vehicles, offers you the possibility of connecting to your vehicle's OBDII (On Board Diagnostic II) to:

- acquire and monitor petrol correctors during gas operation
- compensate for variability in the quality and composition of gas

Use Omegas 4.0 to check the petrol injector connection and conduct diagnosis of operation on individual gas injectors, and to manage partially petrol-fuelled operation, guaranteeing excellent performance in terms of quality and durability. Its PIN-outs enable the ECU for management and control of external electronic devices.
Omegas 4.0 is Connect Ready (compatible with Landi Renzo Connect).

FUNCTIONALITIES

OBD II Vehicle CAN
Scan Tool integrated in the SW as a support to the calibration
external relay Command exclusion petrol pump
variator external advance Command
Reading also RPM signals from wheel sensors phonic effeto lobby
Calibration Map contributui petrol and gas fuel passage
Connect Ready



HOMOLOGATION

E3 67R-6043
E3 110R-006070
E3 10R-036385

TECHNICAL DETAILS

TECHNICAL SPECIFICATIONS	
GAS TYPE AND NUMBER OF CYLINDERS	LPG, CNG - 2÷4 CIL
CASE	METALLIC
SUPPLY VOLTAGE	10 ÷ 16 V
MAX CURRENT WITH ACTUATORS OFF	≤ 0.5 A
STANDBY MAX CURRENT:	≤ 50 µa
DRIVER INJECTORS:	4
SOLENOID VALVES OUTPUT:	2
MAXIMUM CURRENT (FOR SINGLE OUTPUT):	2A
FLASH MEMORY:	128 kb
PROCESSOR SPEED (pll):	50 MHz
WEIGHT:	196 g
DIMENSION:	134x152x36 mm
WORKING TEMPERATURE:	-40°C ÷ 110°C
CLASS IP :	IP6K9K
ECU CONNECTOR:	48 PIN

FEATURES

HW GENERAL

- Current control Inj Gas Driver (new ST drivers)
- Buffered MAP (original signal reading)
- Low standby current (Iq < 50µA)

OBD

- CAN OBD connection
- Fast/Slow trimmer reading
- Auto-adaptive Strategy
- Showing of main scan tool parameters
- Petrol OBD CONNECTION
- OBD error reset (complete or selective)

SENSOR LEVEL

- Management of level sensor AEB/LR/0-90 ohm
- Management of level sensor Cartesio
- Management of custom level sensor
- Refueling detection
- Gas level

DIAGNOSIS

- Gas injectors
- Injectors flow correction
- Sensor and switch
- Gas injectors enable/ disable
- Real time diagnosis on petrol injectors connection

LAMBDA

- Lambda probe reading
- Linear lambda probe UEGO emulation
- Lambda probe emulation

RPM

- RPM Negative Coil
- RPM reading from Hall sensor
- RPM weak signal
- Inj. Time (MAP)

COMMUNICATION

- Serial usb
- Serial wireless
- App connect

TEMPERATURE SENSORS

- Management of water temperature sensor
- Management of gas temperature sensor

OTHER STRATEGIES

- Start & stop
- Valvetronick vehicle management
- Pressure gas work setting
- Input for the level of oil dispensing systems (alternative to the Gas level sensor)
- Petrol Pump Cutting
- Petrol Pump FeedBack
- Ticket Service

SWITCH TO GAS STRATEGIES

- Smooth Change Over petrol to gas (Custom transition between cylinders)
- Smooth Progressive Switching to gas: Change Over / Cut Off / Idle to Petrol / Other
- Switch to Gas on water temperature
- Switch to Gas on gas temperature
- Progressive standard Change Over petrol to gas
- No switch (Button disabled)

GAS STRATEGIES

- Autotuning
- 12x12 gas map
- Switch Led dimmer
- Switch Buzzer Volume setting
- Changing GAS injections sequences
- Antistall
- Pre heating Gas Injectors
- Flex fuel
- Extra injection management
- Dither

PETROL STRATEGIES ON GAS

- Split fuel option
- Automatic Petrol addition
- (Gas Inj. Time > Cycle Time)
- Petrol addition Full Map
- Petrol addition with sequence advance activated
- Petrol addition high RPM & high T_INJ

PRESSURE SENSORS

- Management of Gas pressure sensor
- Management of MAP sensor
- Management of system without MAP sensor

SWITCH TO PETROL STRATEGIES

- Switch to petrol at High RPM & High T_Inj
- Switch to petrol at IDLE