## CLS: INTEGRATED CONTROL SYSTEM WITH GRAPHIC DISPLAY



**CLS** is a device able to meet all types of needs in global automation systems.

Its wide display allows a quick and clear analysis of vehicle status, its maintenance conditions, sensors status and so on, also through multiple graphic pages.

It has several integrated inputs/outputs, to become a real stand-alone and compact control system for middle size machines size.

To complete the features, it has buttons high visibility warning lights in the same box.

CAN-BUS port allows full integration with existing networks.



#### **TECHNICAL DATA**

#### **CONTROL SYSTEM:**

Microprocessor Freescale 16bit, 25 MHz

- RAM memory 364KB program data
- RAM memory 160 KB frame buffer
- Flash memory 256 KB for software
- Flash memory 1 MB fonts and icons storage
- EEPROM 3 KB for Parameters Storage
- Additional Flash memory 256KB for data logging and Black Box
- Real time clock with 240 byte RAM and rechargeable backup battery

#### **CONNECTIVITY:**

- 2 CAN-BUS, CAN 2.0B (11 or 29-bit), ISO 11898-2 compliance, speed up to 1 Mbit/s,
- 1 serial line standard RS232 (baud rate up to 57600 baud)

#### **ELECTRICAL CHARACTERISTICS:**

- Power Supply: +9 V ÷ +30 Vdc

### FEATURES:

- 3.8" B/W display transflettive.
  - Overall size 76.8(W) x 57.6(H) mm.
  - Resolution 320 x 240 pixels
  - View angle 80°
  - Brightness 60 cd/m2
  - Backlighting: White LEDs
- Version with 6 high-brightness customizable pilot lights
- Version with 6 high-brightness customizable pilot lights and 4 function keys and access to the menus
- On Dash or In Dash installation

#### **MECHANICAL CHARACTERISTICS AND RATINGS:**

- Housing: Stainless steel or ABS
- Operating temperature range: from -20° C to +70° C
- Storage temperature range: from -30° C to +80° C

# **MECHANICAL DIMENSIONS:** STA FRONTALE CONTENITORE IN DASH VERSION 125 -80 **BRACKET** SCALE 1:2 150 ON DASH VERSION

#### novatestings.coml/O CONFIGURATION:

- 4 Input/Output software configurable as:
  - On/Off Inputs (High-side)
  - On/Off Outputs (High-side current 2A, short circuit current 8A), short circuit protected.
  - **PWM Outputs** (High-side current 2A, short circuit current 8A), short circuit protected.
- 2 Input/Output software configurable as:
  - On/Off Inputs (High-side)
  - On/Off Outputs (High-side current 2A, short circuit current 8A), short circuit protected.
- 4 Input software configurable as:
  - On/Off Inputs (High-side)
  - Analog Inputs with range 0 ÷ +5.5 V, 10-bit resolution
  - Analog Inputs with range 0 ÷ +30 V, 10-bit resolution
  - Analog Inputs with range 0 ÷ 20 mA, 10-bit resolution
- 4 Input software configurable as:
  - On/Off Inputs (High or Low side)
  - Analog Inputs with range 0 ÷ +5.5 V, 10-bit resolution
  - Analog Inputs with range 0 ÷ +30 V, 10-bit resolution
  - Analog Inputs with range 0 ÷ +5.5 V with current pump

