



## **Hybrid System Accessories Demo Model: ZC-XTPJ01A**

### Features:

- The simulator on HEV (Hybrid Electric Vehicle) fuel type included in a complete set of educational equipment addressed to the basic study of systems for cars.
- The simulator should consist of a computer-assisted panel, with silk-screen mimic diagram for a clear location of its components.
- Various zones of the mimic diagram represented with different colors to emphasize peculiar aspects of the system.
- Light indicators, installed in the mimic diagram enable to assess the evolutions of the control.
- The graphic display of the information available at the control input, such as speed, temperatures, on the computer screen enables the permanent monitoring of the system.
- The operational conditions are set by students according to the educational path indicated in the courseware.
- The testing phase completed with insertion of faults, carried out by the PC, for the study of maintenance.

### Training Programs to be Performed:

- Hybrid Electric Vehicle (HEV) architecture
- Electric permanent magnet synchronous motor (PMSM)
- Battery
- Electric motor ECU
- Engine fuel ECU

- m. Data network
- n. Operation modes
- o. engine starting
- p. low and high speed cruising
- q. light and full acceleration
- r. deceleration and braking
- s. reverse
- t. Regenerative braking
- u. Battery charging

### Specification:

The system should arrange on a wide silk-screen, panel should be provided with
Color silk screen panel
Test jacks of 2 mm
Pushbutton ignition key
Selection of the operational conditions with potentiometers and buttons
Display of state of the system with both single and bargraph Leds
Automatic speed lever PRNDB
Battery test points
Impact simulation pushbutton
Dynamic display of the parameters, on the computer screen, with software of high graphic performance
USB connection with the computer
Power supply: 230 Vac 50 Hz single-phase - 50 VA