MODULE

TPS-3340 BASIC ELECTRONICS TRAINING SYSTEM

Objectives

This course introduces the student to analog and digital electronic systems, based on a problem-solving approach: Switches and sensors, Driver and loads, Gate applications, Timers & Counters, System control, Power regulation, Amplifiers, Measurements in electronic systems, Challenging exercises.

Description

The system is stand-alone, containing all the necessary electronics components needed for performing the experiments.

EITech 3000
Electricity and Electronics

M O D U L E

TPS-3340

Basic Electronics Training System

Technical caracters

The trainer is in a metal case with a wide experiment platform printed circuit board (22X36 cm), which ensures easy handling and good visibility of the components. The components are located on the board with silk screen print of the analytical circuit and component symbols. The central part of the experimenting board includes all the circuit block drawings and the all the hands on components, test points and banana sockets. The protected components are located on the top side of the board panel, clearly visible to the student and covered by a sturdy transparent protecting cover.

The system includes a built in power supply with +12V, +5V and variable DC voltage outlets. An included low voltage external AC power adapter feeds the system.

- Sensors: touch, wet, light, magnetic, temperature.
- Loads: Lamp, motor, electromagnet, buzzer, relay
- Gates: AND, OR, NOT, NAND, NOR.
- Latch, counter, timer, pulse generator
- Driver, amplifier, potentiometer.
- SES Lab unit with two-channel scope and function generator, which communicates with a PC for controlling the function generator and displaying the scope's signals including spectrum analysis.

Experiments

This system enables the student to perform several experiments based on a problem-solving approach and covers the following topics:

- Switches and sensors
- Driver and consumers
- Gate applications
- Timers & Counters
- System control
- Power regulation
- Amplifiers
- Measurements in electronic systems
- Challenge exercises
- A student experiment manual accompanies the system.

Scientific Educational Systems