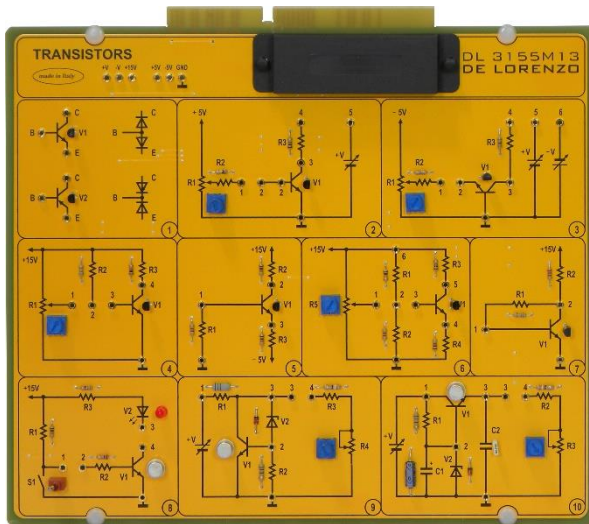




## TRANSISTORS



**DL 3155M13**

The design and construction of electronic circuits to solve practical problems is an essential technique in the fields of electronic engineering and computer engineering.

With this board the students can study the characteristics of the transistor, how is polarized and its use as a voltage regulator or switch.

### THEORETICAL TOPICS

- The transistor currents
- Input and output characteristics
- Collector feedback polarization
- Voltage divider polarization
- Emitter polarization
- The transistor as a switch
- The transistor as a regulator
- Reading and use of technical specifications taken from the catalogues

### CIRCUIT BLOCKS

- Verification of the integrity of the junctions of a BJT transistor
- Recording of the input and output characteristics of a BJT transistor in the common emitter configuration
- Recording of the output characteristics of a BJT transistor in the common base configuration
- The base polarization of a BJT transistor
- The emitter polarization of a BJT transistor
- The polarization of a BJT transistor with voltage divider
- The polarization of the collector feedback BJT transistor
- Operation of a BJT transistor as a switch
- Voltage regulator with parallel transistor
- Voltage regulator with series transistor

Complete with theoretical and practical manual.

Dimensions of the board: 297x260mm



# TIME ELECTRONIC BOARDS



## CAI SOFTWARE:

Each board of the TIME system can be supplied complete with a Student Navigator software that allows students to perform their learning activities through a Personal Computer, without the need for any other documentation.

**Ordering code:** please add SW after the code of the board (i.e. DL 3155M13SW)

## Required:

### POWER SUPPLY NOT INCLUDED

Base frame with power supply (completed with connecting cables):

- **DL 3155AL3** - Base frame with power supply and interface to pc and virtual instrumentation
- **DL 3155AL2** - Base frame with power supply and interface to pc

Basic power supply (connecting cables not included):

- **DL 2555ALF** - DC power supply  $\pm 5 \pm 15$   $0 \pm 15$  Vdc, 1A
- **TL 3155AL2** - Connecting cables

Choosing this power supply, for the execution of the experiments, it is normally required the use of an oscilloscope and two multimeters.

