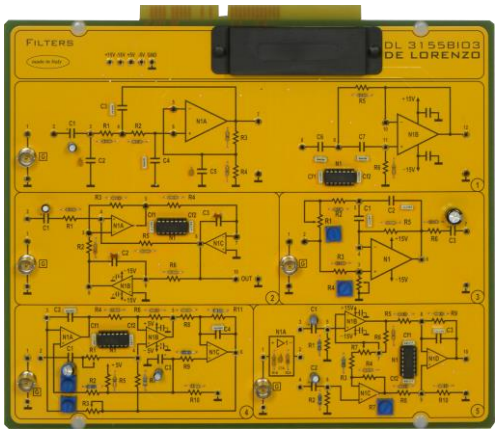
TIME ELECTRONIC BOARDS

FILTERS



DL 3155BIO3

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

In this course we will study the devices that allow the passage of biomedical signals with given characteristics, while attenuating those that do not comply with the required parameters.

THEORETICAL TOPICS

- Filtering of the biomedical signals
- Types and characteristics of the filters
- Main configurations of the 1st and 2nd order filters
- Active LP, HP and KHN filters
- Filters applications in the biomedical instrumentation
- Notch filter
- Filters used in the measurement of the EEG and of the EMG

CIRCUIT BLOCKS

- Low-Pass
- Band-Pass
- High-Pass
- Notch
- Band-Stop

Complete with theoretical and practical manual.
Dimensions of the board: 297x260mm

This board does not substitute the medical device under study. The results of the experiments have no medical value. They are just for demonstration purposes.

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 3155BIO3SW)

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 2555ALG -** DC power supply ±5 ±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.