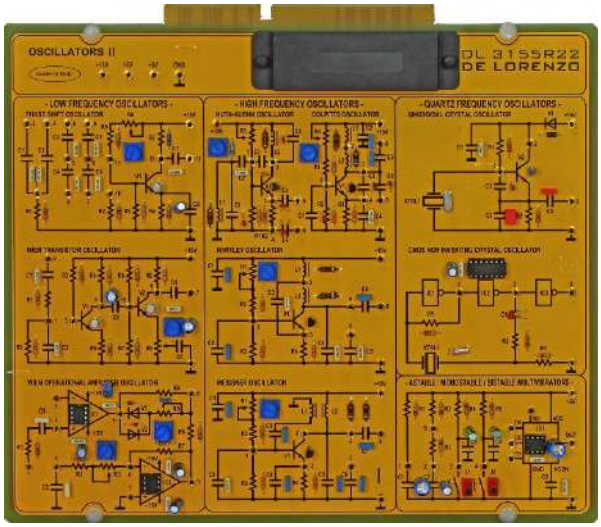
TIME ELECTRONIC BOARDS

REGULATION SYSTEMS



DL 3155R33

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 operating principle of a control system. In this card the most common adjustments are used such as PID and On-Off controls. In addition to increase the teaching experience it is provided with a digital controller with display, alarm circuits and DAC output stages.

THEORETICAL TOPICS

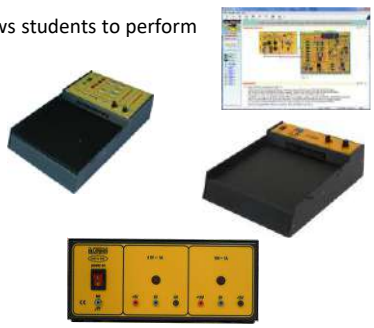
- Familiarization with control and regulation
- Familiarization with different types of control (Open and Closed loops)
- Characteristics of different regulating types (P, PI, PD, PID and On-Off)
- PWM regulation
- Linear power amplifier
- The behavior of an analog PID controller (Kp, Ki and Kd)
- Digital controller
- A/D and D/A converters
- Relays alarms circuitry

CIRCUIT BLOCKS

- PWM drivers
- Alarm circuits
- DAC output stages
- Linear amplifier
- Analog PID controller
- Digital controller with Display

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

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 3155R33SW)



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.